

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: November 23, 2005, 04:50:08 ; Search time 2.73403 Seconds
(without alignments)
203.984 Million cell updates/sec

Title: US-09-455-978b-77

Sequence: 1 MSNDNLTAVTADVRNGIDGH.....DELVARFLPMLKLTFFDOOI 184

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 17545 seqs, 3030971 residues

Total number of hits satisfying chosen parameters: 17545

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_AA_New:*
1: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
3: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
6: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
7: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pep:*
8: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	84	9.0	421	1	US-10-858-730-2
2	75.5	8.1	532	1	US-10-793-626-456
3	75.5	8.1	532	1	US-10-793-626-2042
4	75.5	8.1	724	1	US-10-793-626-968
5	75	8.0	655	7	US-11-045-802-29
6	74	7.9	581	7	US-11-045-802-30
7	74	7.9	584	7	US-11-045-802-31
8	73	7.8	579	7	US-11-045-802-32
9	72.5	7.8	610	1	US-10-858-730-292
10	72	7.7	579	7	US-11-045-802-33
11	71	7.6	152	1	US-10-858-730-72
12	70.5	7.6	530	1	US-10-858-730-67
13	70.5	7.6	597	7	US-11-045-802-28
14	70.5	7.6	692	7	US-11-045-802-26
15	69.5	7.4	360	7	US-11-082-389-90
16	69.5	7.4	360	7	US-11-082-389-92
17	69.5	7.4	719	1	US-10-793-626-1548
18	68.5	7.3	516	7	US-11-045-802-36
19	68.5	7.3	565	7	US-11-045-802-34
20	68.5	7.3	710	7	US-11-045-802-2
21	68.5	7.3	710	7	US-11-045-802-19
22	68.5	7.3	710	7	US-11-045-802-20
23	68.5	7.3	710	7	US-11-045-802-21
24	68.5	7.3	710	7	US-11-045-802-22
25	68.5	7.3	710	7	US-11-045-802-23

26	68.5	7.3	710	7	US-11-045-802-24	Sequence 24, Appl
27	67.5	7.2	611	7	US-11-082-389-436	Sequence 436, App
28	67	7.2	602	1	US-10-793-626-2362	Sequence 2362, Ap
29	67	7.2	828	1	US-10-467-962B-99	Sequence 99, Appl
30	66.5	7.1	364	1	US-10-984-376-5	Sequence 5, Appl1
31	66.5	7.1	364	1	US-10-984-376-6	Sequence 6, Appl1
32	66.5	7.1	540	7	US-11-045-802-35	Sequence 35, Appl
33	66.5	7.1	598	7	US-11-082-389-38	Sequence 398, App
34	66.5	7.1	911	1	US-10-858-730-9	Sequence 9, Appl1
35	66	7.1	403	1	US-10-858-730-27	Sequence 27, Appl
36	65.5	7.0	246	1	US-10-793-626-2166	Sequence 2166, Ap
37	65.5	7.0	1451	7	US-11-046-346-1	Sequence 1, Appl
38	65	7.0	488	1	US-10-485-517-307	Sequence 307, App
39	64	6.9	1992	7	US-11-013-759-13	Sequence 13, Appl
40	64	6.9	1992	7	US-11-013-759-13	Sequence 13, Appl
41	64	6.9	2047	7	US-11-013-759-4	Sequence 4, Appl1
42	64	6.9	2047	7	US-11-013-759-7	Sequence 7, Appl1
43	63.5	6.8	782	1	US-10-793-626-2352	Sequence 2352, Ap
44	63	6.8	403	1	US-10-858-730-28	Sequence 28, Appl
45	63	6.8	418	1	US-10-858-730-6	Sequence 6, Appl1

ALIGNMENTS

RESULT 1
US-10-858-730-2
; Sequence 2, Application US/10858730
; Publication No. US20050255568A1
GENERAL INFORMATION:
; APPLICANT: Bailey, Richard B.
; APPLICANT: Blomquist, Paul
; APPLICANT: Doten, Reed
; APPLICANT: Driggers, Edward M.
; APPLICANT: Madden, Kevin T.
; APPLICANT: O'Leary, Jessica
; APPLICANT: O'Toole, George
; APPLICANT: Trueheart, Joshua
; APPLICANT: Walbridge, Michael J.
; APPLICANT: Yorgey, Peter S.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR AMINO ACID
; FILE OF INVENTION: PRODUCTION
; FILE REFERENCE: 14184-030001
; CURRENT APPLICATION NUMBER: US/10/858,730
; CURRENT FILING DATE: 2004-06-01
; PRIOR APPLICATION NUMBER: US 60/475,000
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: US 60/551,860
; NUMBER OF SEQ ID NOS: 364
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 421
; TYPE: PRT
; ORGANISM: Amycolatopsis mediterranei
US-10-858-730-2

Query Match 9.0%; Score 84; DB 1; Length 421;

Best Local Similarity 27.1%; Pred. No. 0.39; Mismatches 26; Gaps 8;

Matches 42; Conservative 23; Indels 64; Deletions 26; Gaps 8;

QY	2	SNNDTLVTADVRNGIDGHALDRIGLDEAEMRLSFTGIDDDTMAALAEQPLFATA	61
DB	234	SDKRGTTVTSIREIPEVQALITGVANDRSEA--KITVTGVPDHTGAAAR---IFVIA	287
QY	62	DAVTFYDHLSEYE-----RTQDLF-----ANSTKYVEQLKETOAEYLIGAGEYDTEY	112
DB	288	DAEI-DIDWVLQVSVTSVSGRTDITFLSANGAKAVKELEKQAE--IGFESVLYDD--	342
QY	113	AAORARIGKIDVYLGAPDYVYLGATRYRYTGLDA	147
DB	343	-----HYGKV-SVYGAGMRSHPGVTATFCALAEVA	371

```
RESULT 2
US-10-793-626-456
; Sequence 456, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; PRIOR FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 456
; LENGTH: 522
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-10-793-626-456

Query Match      8.1%; Score 75.5; DB 1; Length 522;
Best Local Similarity 23.2%; Pred. No. 3;
Matches 49; Conservative 30; Mismatches 87; Indels 45; Gaps 9;

4 DNDTLVTAD--VRN-----GIDGHALADRIGLDEAEIARLSFTGID----- 44
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145 DNVSLIKLDGVTKNFRVTKIFGYFGLKREIEEQAQGLIIVSGMEDINVGETVPHDHR 204
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45 DTMALAAEQPLFEATADALVTDFYDHEESY---ERTODLFANSTKYVEQLKET---QAE 98
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205 DPLPVLRIDEPTLEMTFKVNNSPFAGREGDVTARQIOERLDQOLETVDSLKVTPTDPP 264
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99 YLLGIGRGEYDTEVAAGRAR-----IGKIHVILGCPDVYLGAVTRYTGILDALADD 151
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| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
265 SWVAVGRGELHLSLIENMRREGFELQVSK-----PQVIL-----REIDGVLSPPER 312
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| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
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152 VVAD--RGEAAAVDELVARFLPMLKLLTFD 181
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313 VOCEVPSENAGAVIESLGARKGEMLDMMTTD 343
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RESULT 3
US-10-793-626-2042
; Sequence 2042, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; PRIOR FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2042
; LENGTH: 522
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-10-793-626-2042

Query Match      8.1%; Score 75.5; DB 1; Length 522;
Best Local Similarity 23.2%; Pred. No. 3;
Matches 49; Conservative 30; Mismatches 87; Indels 45; Gaps 9;

4 DNDTLVTAD--VRN-----GIDGHALADRIGLDEAEIARLSFTGID----- 44
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145 DNVSLIKLDGVTKNFRVTKIFGYFGLKREIEEQAQGLIIVSGMEDINVGETVPHDHR 204
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45 DTMALAAEQPLFEATADALVTDFYDHEESY---ERTODLFANSTKYVEQLKET---QAE 98
| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
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205 DPLPVLRIDEPTLEMTFKVNNSPFAGREGDVTARQIOERLDQOLETVDSLKVTPTDPP 264
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99 YLLGIGRGEYDTEVAAGRAR-----IGKIHVILGCPDVYLGAVTRYTGILDALADD 151
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265 SWVAVGRGELHLSLIENMRREGFELQVSK-----PQVIL-----REIDGVLSPPER 312
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152 VVAD--RGEAAAVDELVARFLPMLKLLTFD 181
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313 VOCEVPSENAGAVIESLGARKGEMLDMMTTD 343
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RESULT 4
US-10-793-626-968
; Sequence 968, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; PRIOR FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 968
; LENGTH: 724
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-10-793-626-968

Query Match      8.1%; Score 75.5; DB 1; Length 724;
Best Local Similarity 23.1%; Pred. No. 4.5;
Matches 48; Conservative 28; Mismatches 75; Indels 57; Gaps 11;

4 DNDTLVTADVNRNGIDGHALADRIGLDE--AEIARLSFTGIDDTMALAAEQPLFEATA 61
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111 DNDVDKEDIINKI-VHILANEBAIIDKIAEDQMYDYGELDELNI----- 158
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
62 DALYTDFYDHEESYERTODLFANSTKYVEQLKETQAEYLLGIGRGEY-DTEVAAGRAR-- 118
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159 -----YNHIEBRLLKDI-SNKLIVSKSNLSIQFHLLGMGFKKYIDTLKISIMBL 210
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119 -----IGKIHVDVILG-----PDVYLGAVTRY--YTGILDALADVVYA 154
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
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211 LTTTKTIQISETLGFNSVSTYSROFNKYLSTVPNAV-RAMKKYDKVNGCSB--DDV-- 264
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
155 DRGEAAAVDELVARFLPMLKLLTFDQ 182
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
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265 ---SEHLKSCVQSLICKMPTNELDNYDE 290
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RESULT 5
US-11-045-802-29
; Sequence 29, Application US/11045802
; Publication No. US2005025789A1
; GENERAL INFORMATION:
; APPLICANT: Gordon-Kamm, William
; APPLICANT: Helentjaris, Tim
; APPLICANT: Lowe, Keith
; APPLICANT: Shen, Bo
; APPLICANT: Tarczyński, Mitchell
; APPLICANT: Zheng, Peizhong
; TITLE OF INVENTION: Ap2 Domain Transcription Factor ODP2 (Ovule Development Protein 2
; TITLE OF INVENTION: and Methods of Use
```

```
Db 145 DNVSLIKLDGVTKNFRVTKIFGYFGLKREIEEQAQGLIIVSGMEDINVGETVPHDHR 204
Qy 45 DTMALAAEQPLFEATADALVTDFYDHEESY---ERTODLFANSTKYVEQLKET---QAE 98
Db 205 DPLPVLRIDEPTLEMTFKVNNSPFAGREGDVTARQIOERLDQOLETVDSLKVTPTDPP 264
Qy 99 YLLGIGRGEYDTEVAAGRAR-----IGKIHVILGCPDVYLGAVTRYTGILDALADD 151
Db 265 SWVAVGRGELHLSLIENMRREGFELQVSK-----PQVIL-----REIDGVLSPPER 312
Qy 152 VVAD--RGEAAAVDELVARFLPMLKLLTFD 181
Db 313 VOCEVPSENAGAVIESLGARKGEMLDMMTTD 343

RESULT 4
US-10-793-626-968
; Sequence 968, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; PRIOR FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 968
; LENGTH: 724
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-10-793-626-968

Query Match      8.1%; Score 75.5; DB 1; Length 724;
Best Local Similarity 23.1%; Pred. No. 4.5;
Matches 48; Conservative 28; Mismatches 75; Indels 57; Gaps 11;

4 DNDTLVTADVNRNGIDGHALADRIGLDE--AEIARLSFTGIDDTMALAAEQPLFEATA 61
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111 DNDVDKEDIINKI-VHILANEBAIIDKIAEDQMYDYGELDELNI----- 158
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
62 DALYTDFYDHEESYERTODLFANSTKYVEQLKETQAEYLLGIGRGEY-DTEVAAGRAR-- 118
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
159 -----YNHIEBRLLKDI-SNKLIVSKSNLSIQFHLLGMGFKKYIDTLKISIMBL 210
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119 -----IGKIHVDVILG-----PDVYLGAVTRY--YTGILDALADVVYA 154
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211 LTTTKTIQISETLGFNSVSTYSROFNKYLSTVPNAV-RAMKKYDKVNGCSB--DDV-- 264
| : : : : : : : : : ~~~~~~| : : : : ~~~~~~| : : : : ~~~~~~| : : : :
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155 DRGEAAAVDELVARFLPMLKLLTFDQ 182
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265 ---SEHLKSCVQSLICKMPTNELDNYDE 290
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RESULT 5
US-11-045-802-29
; Sequence 29, Application US/11045802
; Publication No. US2005025789A1
; GENERAL INFORMATION:
; APPLICANT: Gordon-Kamm, William
; APPLICANT: Helentjaris, Tim
; APPLICANT: Lowe, Keith
; APPLICANT: Shen, Bo
; APPLICANT: Tarczyński, Mitchell
; APPLICANT: Zheng, Peizhong
; TITLE OF INVENTION: Ap2 Domain Transcription Factor ODP2 (Ovule Development Protein 2
; TITLE OF INVENTION: and Methods of Use
```

```

: FILE REFERENCE: 035718/286074
: CURRENT APPLICATION NUMBER: US/11/045,802
: CURRENT FILING DATE: 2005-01-28
: PRIOR APPLICATION NUMBER: 60/541,122
: PRIOR FILING DATE: 2004-02-02
: NUMBER OF SEQ ID NOS: 38
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO: 29
: LENGTH: 655
: TYPE: prt
: ORGANISM: Oryza sativa
: US-11-045-802-29

```

Query Match	8.0%;	Score 75;	DB 7;	Length 655;
Best Local Similarity	22.4%;	Pred. No. 4.4;		
Matches 35;	Conservative 23;	Mismatches 50;	Indels 48;	Gaps 77

```
Qy      4 GIDDDTMAALAAECPLFEATADALVDFYDHLESYEETQDLFANSTKVEQLKE-TOAEY 99
        |||   ||||| |         |||          |||    |||
Db       314 GYDKEDKAARAYDIALAKIYWGTITTNF--EMSNTE-----KELEBKHKMTIRQEY 361
```

```

Oy      100  LGL-----GGEY-----DTYAACQCARIGKHKDVLGLSPDVLYGAATRYYYTGLL    145
          :|         |||||::|||::
Db      362  IAHLRNNSGSGFGASKRGVTRRHQHGRWQARIGRVAG-----NKDIYLGTFS-----    410

```

```

Qy      146 DALADDVAVDRGEAAAAVDELVARFLPMKLLTFD 18
          . | | | | : : : |
Db      411 -----TEEEAAEAAYIAAIKFRGLNAVTFD 436

```

```

RESULT 6
US-11-045-802-30
; Sequence 30, Application US/11045802
; Publication No. US20050257289A1
; GENERAL INFORMATION:
; APPLICANT: Gordon-Kamm, William
; APPLICANT: Helentjaris, Tim
; APPLICANT: Lowe, Keith
; APPLICANT: Shen, Bo
; APPLICANT: Tarczynski, Mitchell
; APPLICANT: Zheng, Peizhong
; TITLE OF INVENTION: Ap2 Domain Transcription Factor ODP2 (Ovule Development Protein 2)
; TITLE OF INVENTION: and Methods of Use
; FILE REFERENCE: 035718/286074
; CURRENT APPLICATION NUMBER: US/11/045.802
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: 60/541,122
; PRIOR FILING DATE: 2004-02-02
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 30
; LENGTH: 581
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-11-045-802-30

```

```

Query Match      7.9%; Score 74; DB 7; Length 581;
Best Local Similarity 23.7%; Pred. No. 4.7;
Matches 37; Conservative 18; Mismatches 53; Indels 48; Gaps 7;

QY      41 GIDDDTMAALAEQPLFEATADALVTDFVDHLESYERTODLFANSTKYVEQLKE-TOAEY 99
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      245 GYDKEEKAADAYDIALKLYMGTTTTTNF--PLSEYE-----KEVEEMGHMTRQEY 292
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

QY      100 LL-----GLGRG-----EYDTEYAQRRIKGIHIVLGLGPVNLGATRYRYTGL 145
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB      293 VASLRKSSGFSRCSASIRGVTRHHQHGRRMQRIRGVAG---NKDLYLGTF----- 340
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY      146 DALADVDVADRGEEAAAADVELVARFLPMLKLTTFD 181
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      341 -----GTQEEAAEAAYDIAIKFRGLSAVTNFD 367
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

```

```

RESULT 7
US-11-045-802-31
; Sequence 31, Application US/11045802
; Publication No. US20050257289A1
; GENERAL INFORMATION:
; APPLICANT: Gordon-Kamm, William
; APPLICANT: Helentjaris, Tim
; APPLICANT: Lowe, Keith
; APPLICANT: Sher, Bo
; APPLICANT: Tarczynski, Mitchell
; APPLICANT: Zheng, Peizhong
; TITLE OF INVENTION: Ap2 Domain Transcription Factor ODP2 (Ovule Development Protein 2)
; TITLE OF INVENTION: and Methods of Use
; FILE REFERENCE: 035718/286074
; CURRENT APPLICATION NUMBER: US/11/045,802
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: 60/541,122
; PRIOR FILING DATE: 2004-02-02
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 31
; LENGTH: 584
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-11-045-802-31

```

Query Match 7.9%; Score 74; DB 7; Length 584;
Best Local Similarity 23.7%; Pred. No. 4.7;
Matches 37; Conservative 18; Mismatches 53; Indels 48; Gaps 7;

QY 41 GIDDDMAALAAECPFEATADALVDFDHLSEYERTQDIIPANSTIVEQLKE-TOAEY 99
||| : |||
Db 248 GYDKREKAKARAYDLALKWMPFTTINF--PLSEYE-----KEVEEMGMNTRGEY 255

QY 100 LL-----GLGSG-----EYDTFAACGARIGKIKHDVLGLGPPDVLGAAYTRYITLL 145
 ::: ::: ::: ::: :::
Db 296 VASLRKSSGFSRGSASTYRGVTRHHQHGRRWQARIGRVAG-----NKDILYLGTF----- 343

```

QY      146 DALADVDVADRGEEAAAADVELVAREFLPMILKLTIFPD 183
          ||||| : : ||
DB      344 -----GTQEEAAAEAYDIAAIKFRGLSAVTNFD 370

```

```

RESULT 8
US-11-045-802-32
; Sequence 32, Application US/11045802
; Publication No. US20050257289A1
; GENERAL INFORMATION:
; APPLICANT: Gordon-Kamm, William
; APPLICANT: Helentjaris, Tim
; APPLICANT: Lowe, Keith
; APPLICANT: Shen, Bo
; APPLICANT: Tarczyński, Mitchell
; APPLICANT: Zheng, Peizhong
; TITLE OF INVENTION: Ap2 Domain Transcription Factor ODP2 (Ovule Development Protein)
; TITLE OF INVENTION: and Methods of Use
; FILE REFERENCE: 035718/286074
; CURRENT APPLICATION NUMBER: US/11/045,802
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: 60/541,122
; PRIOR FILING DATE: 2004-02-02
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 32
; LENGTH: 579
; TYPE: PRT
; ORGANISM: Brassica napus
US-11-045-802-32

```

Query Match	7.8%	Score 73;	DB 7;	Length 579;
Best Local Similarity	23.1%;	Pred. No. 5.8;		
Matches	36;	Conservative	19;	Mismatches 53;
				Indels 48;
				Gaps 7;

```

Oy      104 GRGEY-----DTEYAAQRARIGKIHVLGLGPDVYLGAATRYTGLLDLADDDVAD 155
          ||| ||| ||| ||| ||| ||| |||
Db      128 GPSTKLPVLGHTHEYAVIR-----DAYTEAALGMLDGGADALIVE 166

```



```

; APPLICANT: Schroder, Hartwig
; APPLICANT: Zelder, Oskar
; APPLICANT: Habernauer, Gregor
; TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING PROTEINS
; TITLE OF INVENTION: INVOLVED IN MEMBRANE SYNTHESIS AND MEMBRANE
; TITLE OF INVENTION: TRANSPORT
; FILE REFERENCE: BGI-131PCN
; CURRENT APPLICATION NUMBER: US/11/082,389
; CURRENT FILING DATE: 2005-03-16
; PRIOR APPLICATION NUMBER: US 09/603024
; PRIOR FILING DATE: 2000-06-23
; PRIOR APPLICATION NUMBER: US 60/141031
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: US 60/143262
; PRIOR FILING DATE: 1999-07-09
; PRIOR APPLICATION NUMBER: US 60/151281
; PRIOR FILING DATE: 1999-08-27
; PRIOR APPLICATION NUMBER: DE 19930487.4
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19930489.0
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19931549.3
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931550.7
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19932134.5
; PRIOR FILING DATE: 1999-07-09
; PRIOR APPLICATION NUMBER: DE 19941379.7
; PRIOR FILING DATE: 1999-08-31
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 446
; SEQ ID NO 90
; LENGTH: 360
; TYPE: prt
; ORGANISM: Corynebacterium glutamicum
; US-11-082-389-90

```

```

Query Match      7.4%; Score 69.5; DB 7; Length 360;
Beef Local Similarity 23.7%; Pred. No. 6.8; Indels 31; Gaps 10;
Matches 45; Conservative 33; Mismatches 81;
QY      2  SNDNDTLVADYRNGIDGHALADRIQIDEAEIAMRLSFTGIDDDTMAALAEQPLFEATA 61
      35  SNNKSAKTA-----LDNVTLT-----VERGEVIGIIGYGAGKSTLVRLI--NGLDSPTS 83
QY      62  DALV---IDFYHLESYERTQDLFANSTYTVEQLEKETOAEYLLGGRGEYDTEY-----A 113
      84  GSLINGTIDIVMPES--KLRLKRSNIGMIFQDFNLFSR--TAAGNVEYPLEVAKMDKA 139
QY      114  AQRARIKIHVDLIG-----PDVYLGAVTYRTYGLDALADVDVADRGEEAAAVD-E 166
      140  ARKARQOELEFVGADGDKKNYPEQLSGG-QKORVGIAHALATNPILLADERTSLDPE 198
QY      167  LVARFLPMUK 176
      199  TTHEVLEILR 208
DB

```

Search completed: November 23, 2005, 05:09:26
 Job time : 3.23403 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Comugen Ltd.

OM protein - protein search, using sw model

Run on: November 23, 2005, 04:37:11 / Search time 18.0446 Seconds
(without alignments)
843.041 Million cell updates/sec

Title: US-09-455-978B-77
Perfect score: 933
Sequence: 1 MSNDNDTLVTADVNRNGIDGH.....DELVARFLPMKLTLPDQOI 184

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents_AA:*

- 1: /cgn2_6/prodata/1/iaa/5.COMB.pep.*
- 2: /cgn2_6/prodata/1/iaa/6.COMB.pep.*
- 3: /cgn2_6/prodata/1/iaa/H.COMB.pep.*
- 4: /cgn2_6/prodata/1/iaa/PCTUS.COMB.pep.*
- 5: /cgn2_6/prodata/1/iaa/RE.COMB.pep.*
- 6: /cgn2_6/prodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	94.5	10.1	396	US-09-902-540-10455	Sequence 10455, A
2	91.5	9.8	955	US-08-428-414A-3	Sequence 3, Appl1
3	89	9.5	955	US-08-006-676B-1	Sequence 1, Appl1
4	89	9.5	955	US-08-282-845-2	Sequence 2, Appl1
5	89	9.5	955	PCT-US94-00324-1	Sequence 1, Appl1
6	86.5	9.3	318	US-09-710-262E-14	Sequence 14, Appl1
7	85.5	9.2	302	US-09-328-352-4846	Sequence 4846, Ap
8	83.5	8.9	319	US-09-489-039A-8872	Sequence 8872, Ap
9	83.5	8.9	640	US-10-241-602B-31	Sequence 31, Appl
10	82.5	8.8	831	US-09-605-703B-1396	Sequence 1396, Ap
11	82	8.8	339	US-10-622-064-28	Sequence 28, Appl
12	82	8.8	542	US-09-252-991A-21396	Sequence 21396, A
13	81.5	8.7	1253	US-09-252-991A-30019	Sequence 30019, A
14	80.5	8.6	700	US-09-252-991A-19384	Sequence 19384, A
15	80	8.6	553	US-09-252-991A-32970	Sequence 32970, A
16	80	8.6	677	US-09-252-991A-18102	Sequence 18102, A
17	79	8.5	438	US-09-540-236-2595	Sequence 2595, Ap
18	79	8.5	592	US-09-902-540-15457	Sequence 15457, A
19	79	8.5	878	US-08-941-936-2	Sequence 2, Appl1
20	78.5	8.4	733	US-09-328-352-5599	Sequence 5599, Ap
21	78.5	8.4	755	PCT-US93-07923-3	Sequence 3, Appl1
22	78.5	8.4	759	PCT-US93-07923-2	Sequence 2, Appl1
23	78.5	8.4	766	US-08-230-491A-3	Sequence 3, Appl1
24	78.5	8.4	766	US-08-619-380A-3	Sequence 3, Appl1
25	78.5	8.4	766	US-08-940-391-3	Sequence 1, Appl1
26	78.5	8.4	766	US-09-794-236-1	Sequence 1, Appl1
27	78.5	8.4	766	US-10-002-593-6	Sequence 6, Appl1

ALIGNMENTS

28	78.5	8.4	766	2	US-09-949-016-6146	Sequence 6146, Ap
29	78.5	8.4	766	2	US-09-265-606-3	Sequence 3, Appl1
30	78.5	8.4	766	2	US-10-423-714-6	Sequence 6, Appl1
31	78.5	8.4	775	2	US-09-949-016-10450	Sequence 10450, A
32	78	8.4	267	2	US-09-902-540-14634	Sequence 14634, A
33	78	8.4	443	2	US-09-328-352-6943	Sequence 6943, Ap
34	78	8.4	510	2	US-09-489-00324-11123	Sequence 11123, A
35	78	8.4	595	2	US-09-902-540-16334	Sequence 16334, A
36	77.5	8.3	331	2	US-09-605-703B-1398	Sequence 1398, Ap
37	77.5	8.3	343	2	US-09-902-540-9727	Sequence 9727, Ap
38	77.5	8.3	629	2	US-09-902-540-12912	Sequence 12912, A
39	77	8.3	297	2	US-09-252-991A-17492	Sequence 17492, A
40	77	8.3	320	2	US-09-252-991A-18063	Sequence 18063, A
41	76.5	8.2	579	2	US-08-976-063E-34	Sequence 34, Appl1
42	76	8.1	531	2	US-09-252-991A-19796	Sequence 19796, A
43	76	8.1	620	2	US-09-477-962-105	Sequence 105, App
44	76	8.1	638	2	US-09-134-000C-4946	Sequence 4946, Ap
45	75.5	8.1	522	2		

```

0
RESULT 1
US-09-902-540-10455
; Sequence 10455, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217, 883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 10455
; LENGTH: 396
; TYPE: PRT
; ORGANISM: Myxococcus xanthus
; US-09-902-540-10455

Query Match      10.1%; Score 94.5; DB 2; Length 396;
Best Local Similarity 23.3%; Pred. No. 0.028;
Matches 40; Conservative 28; Mismatches 81; Indels 23; Gaps 5;

QY      32 ELAARLSFTGIDDTMAAL-ABEOLFEATADALVTFYDHESEYRTODLFANSTKYVE 90
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB      8 ELKRYGFSADBOALVTLHATKPHAFARV----FYDRIIEHGACQALGCGSQVG 63
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY      91 QKETOAEYILGIGREYDTEVAAQARICKIHVDVGLGPDVYLGAVT---RYVTGLIDA 147
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB      64 HNGTGLQVWMDQLLRFPWDEVYALRCRIGRMHVRALPOHYFGAMNIRQGFNSHIDA 123
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY      148 -LADVADGEEAAAV-----DELVARFLPMKLTLPDQOI 184
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB      124 TYEEFPAALRAASAVGKILDELAIMLHYRBDLLAQQARSRILSTFGVLV 175
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 2
US-08-428-414A-3
; Sequence 3, Application US/08428414A
; Patent No. 5912166
; GENERAL INFORMATION:
; APPLICANT: Reed, Steven G.
; TITLE OF INVENTION: COMPOUNDS AND METHODS FOR DIAGNOSIS OF
; TITLE OF INVENTION: LEISHMANIASIS
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY

```

```

? STREET: 6300 Columbia Center, 701 Fifth Avenue
? CITY: Seattle
? STATE: Washington
? COUNTRY: USA
? ZIP: 98104-7092
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? OPERATING SYSTEM: IBM PC compatible
? SOFTWARE: PatentIn Release #1.0, Version #1.30
? APPLICATION NUMBER: US/08/428,414A
? FILING DATE: 21-APR-1995
? CLASSIFICATION: 436
? ATTORNEY/AGENT INFORMATION:
? NAME: Kadlecck, Ann T.
? REGISTRATION NUMBER: 39,244
? REFERENCE/DOCKET NUMBER: 210121.407
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (206) 622-4900
? TELEFAX: (206) 682-6031
? TELEX: 3723836 SEEDANDBERRY
? INFORMATION FOR SEQ ID NO: 3:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 955 amino acids
? TYPE: amino acid
? STRANDEDNESS:
? TOPOLOGY: linear
?
US-08-428-414A-3

Query Match          9.8%; Score 91.5; DB 1; Length 955;
Best Local Similarity 27.3%; Pred.No.0.24; Mismatches 77; Indels 45; Gaps 8
Matches 54; Conservative 22;

QY      13 VNGIGDHALLDRIGIDEAEIAMRLSFTGIDDDTMAALAAEQPLFEATADALT--DFY 69
        :|::||::||::||::||::||::||::||::||::||::||::||::||:
Db       530 VRRRIDAEASRKEL-----ESTVAQLEREREKREVALDALQTQRKIQ 574

QY      70 DHLESYERTODIFANSTKTVEQKETQOAYLLGLGRGEYDE-YAQRARIKIHVDLGL 128
        :|::||::||::||::||::||::||::||::||::||::||::||:
Db       575 EALESSERTA---ARRDQLLOQLTEHQSE-RTQLSQVTVDRRLTFDLQRIQYGEETEL 630

QY      129 GDVVVLGA----YTRYTYGL-----DALADVADAGEEAANAVIDELY--- 168
        :|::||::||::||::||::||::||::||::||::||::||::||:
Db       631 ARDVALLCAQENEAARYHAAVFHLQTLLELATWEMEDALRELRALAERDEAAAASELDAAASTS 690

QY      169 --ARFLPMUKLTLPDOOI 184
        ||::||::||::||::||::||::||::||::||::||::||::||:
Db       691 QNAESACERLTSLDEQL 708

RESULT 3
US-08-006-676B-1
; Sequence 1, Application US/08006676B
; Patent No. 5411865
; GENERAL INFORMATION:
; APPLICANT: Reed, Steven
; TITLE OF INVENTION: Diagnosis of leishmaniasis
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Jeffrey B. Oster
; STREET: 8339 SE 57ch Street
; CITY: Mercer Island
; STATE: Washington
; COUNTRY: USA
; ZIP: 98040-4906
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORD for Windows
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/006,676B

```

```

; FILING DATE: 15-JAN-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Oster, Jeffrey B.
; REGISTRATION NUMBER: 32,586
; REFERENCE/DOCKET NUMBER: REED-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 232 7845
; TELEFAX: (206) 236 0205
; INFORMATION FOR SEQ ID NO: 1 :
; SEQUENCE CHARACTERISTICS:
; LENGTH: 955 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-006-676B-1

Query Match      9.5%; Score 89; DB 1; Length 955;
Best Local Similarity 29.3%; Pred. No. 0.46;
Matches 49; Conservative 19; Mismatches 69; Indels 30; Gaps 7

QY    44 DDTMAALAEPLTEATADALT---DHYDLSEYERQDLFANSTKIVEOUKETNOAYEL 100
       :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
DB     546 ESTVAQLREBREREVALDALQTQRKLQEALLESERTA---AEDDQLQLTLEQSE-R 601
       :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||

QY    101 LGLRGGEYDE-YAORARIGKHIDVLGSPDYVIGA---YTRYTYTL----- 145
       :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
DB     602 TQLSQVVTDRRLTRFDLRIQYEYGETEIARDVLAICAQEWEARVHAAVFIHLTLLLELAT 661
       :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||

QY    146 ---PALADDVVADRGEAAAVDELV-----ARFLPMKLITPDDOI 184
       :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
DB     662 EWEDALRRALAERDEAAAALDPAASTSQNAREACRRLTSLBEOL 708
       :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||

```

```

1      RESULT 4
2      US-08-282-845-2
3      Sequence 2, Application US/08282845
4      Patent No. 5719263
5      GENERAL INFORMATION:
6      APPLICANT: Reed, Steven G.
7      TITLE OF INVENTION: A 230kd Antigen Present in Leishmania
8      TITLE OF INVENTION: Species
9      NUMBER OF SEQUENCES: 3
10     CORRESPONDENCE ADDRESS:
11     ADDRESSEE: Immunex Corporation
12     STREET: 51 University Street
13     CITY: Seattle
14     STATE: WA
15     COUNTRY: USA
16     ZIP: 98101
17     COMPUTER READABLE FORM:
18     MEDIUM TYPE: Floppy disk
19     COMPUTER: Apple Macintosh
20     OPERATING SYSTEM: Apple Macintosh Operating System 7.1
21     SOFTWARE: Microsoft Word for Macintosh 5.1a
22     CURRENT APPLICATION DATA:
23     APPLICATION NUMBER: US/08/282,845
24     FILING DATE:
25     CLASSIFICATION: 435
26     PRIOR APPLICATION DATA:
27     APPLICATION NUMBER: 08/006,676
28     FILING DATE: JANUARY 15, 1993
29     CLASSIFICATION: 435
30     ATTORNEY/AGENT INFORMATION:
31     NAME: Perkins, Patricia Anne
32     REGISTRATION NUMBER: 34,693
33     REFERENCE/DOCKET NUMBER: 5004-A
34     TELECOMMUNICATION INFORMATION:
35     TELEPHONE: (206)587-0430
36     TELEFAX: (206)233-0644
37     INFORMATION FOR SEQ ID NO: 2:
38     SEQUENCE CHARACTERISTICS:
39     LENGTH: 955 amino acids
40

```


TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-282-845-2

Query Match 9.5%; Score 89; DB 1; Length 955;
Best Local Similarity 29.3%; Pred. No. 0.46;

Matches 49; Conservative 19; Mismatches 69; Indels 30; Gaps 7;

QY 44 DDTMAALAEOPLEFATADALVT---DFYDHLSEYERTODLFANSTKVEQLKETOAEYL 100
DB 546 ESTVAOLEEROREFVALDLOTHQKQLEALESSRTA---AERQQLQLTELQSE-R 601
QY 101 LGIGRGEYDTE-YAAGRARIKIHVDLGLGPDVYLGA---YTRYTGLL----- 145
DB 602 TQLSGVVTRERLTRDLQRIQYEGTELARVDALCAQEMEARVHAAYFHLQTLLELAT 661
QY 146 ---DALADVVADRGEEAAAANDELV---ARFLPMLKLTFTDQI 184
DB 662 EWEDALRRERALARDEMAAAAEIDMAASTSONAESACERLTSLBQOL 708

RESULT 5
PCT-US94-00324-1
Sequence 1, Application PC/TUS9400324

GENERAL INFORMATION:

APPLICANT: Reed, Steven
TITLE OF INVENTION: Diagnosis of Leishmaniasis

NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:

ADDRESSEE: Immunex Corporation
STREET: 51 University Street

CITY: Seattle
STATE: Washington

COUNTRY: USA
ZIP: 98101

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple System 7.1

SOFTWARE: Microsoft Word, version 5.1a
CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/00324
FILING DATE:

CLASSIFICATION:
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/006,676
FILING DATE: 15-JAN-1993

ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia Anne

REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 5004-WO

TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430

TELEFAX: (206) 233-0644
INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:
LENGTH: 955 amino acids

TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: protein
PCT-US94-00324-1

Query Match 9.5%; Score 89; DB 4; Length 955;
Best Local Similarity 29.3%; Pred. No. 0.46;

Matches 49; Conservative 19; Mismatches 69; Indels 30; Gaps 7;

QY 44 DDTMAALAEOPLEFATADALVT---DFYDHLSEYERTODLFANSTKVEQLKETOAEYL 100
DB 546 ESTVAOLEEROREFVALDLOTHQKQLEALESSRTA---AERQQLQLTELQSE-R 601
QY 101 LGIGRGEYDTE-YAAGRARIKIHVDLGLGPDVYLGA---YTRYTGLL----- 145

DB 602 TQLSGVVTRERLTRDLQRIQYEGTELARVDALCAQEMEARVHAAYFHLQTLLELAT 661

QY 146 ---DALADVVADRGEEAAAANDELV---ARFLPMLKLTFTDQI 184

DB 662 EWEDALRRERALARDEMAAAAEIDMAASTSONAESACERLTSLBQOL 708

RESULT 6
US-09-710-262E-14
Sequence 14, Application US/09710262E

Patent No. 6887694
GENERAL INFORMATION:

APPLICANT: Rosenberg, Eugene
APPLICANT: Ron, Eliora

APPLICANT: Orr, Elisha
APPLICANT: Paltan, Yoasi

TITLE OF INVENTION: GENE CLUSTER
FILE REFERENCE: 2290.00076

CURRENT APPLICATION NUMBER: US/09/710,262E
CURRENT FILING DATE: 2000-11-10

NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentn Ver. 2.1

SEQ ID NO 14
LENGTH: 318

TYPE: PRT
ORGANISM: Myxococcus xanthus

US-09-710-262E-14

Query Match 9.3%; Score 86.5; DB 2; Length 318;
Best Local Similarity 26.4%; Pred. No. 0.17;

Matches 34; Conservative 15; Mismatches 55; Indels 25; Gaps 3;

QY 73 ESYERTODLFANSTKVEQLKETOAEYLLGIGRGEYDTEYAAQRARIKIHV----- 126
DB 22 QSYFAKELFDQGTGKRQLLEDEQFKRLGHSILERYDARAARLDPLDVLVSPAI 81

QY 127 -----GIGRPVYIGATYTRYTGLLDALADVVADRGEEAAAANDELVARFL 172
DB 82 FMIHAIARLLIDRGIDPAVVGASNGEVA--AAGAI SYDAVALVAAGQLFARFA 139

QY 173 P---MKKL 178
DB 140 PRGMLAVL 148

RESULT 7
US-09-328-352-4846

Sequence 4846, Application US/09328352
Patent No. 6562958

GENERAL INFORMATION:
APPLICANT: Gary L. Breton et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
FILE REFERENCE: GTC99-03PA

CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04

NUMBER OF SEQ ID NOS: 8252
SEQ ID NO 4846

LENGTH: 302
TYPE: PRT

ORGANISM: Acinetobacter baumannii
US-09-328-352-4846

Query Match 9.2%; Score 85.5; DB 2; Length 302;
Best Local Similarity 29.4%; Pred. No. 0.21;

Matches 37; Conservative 23; Mismatches 41; Indels 25; Gaps 7;

QY 25 RIGL---DEAEIARLSFTGIDDTMAALAEOPLEFATADALVTDFYDHLSEYERTODL 81
DB 179 RIGLSNVDSAEILKSLP-QGPHNNTLVYL---DPPYAKGQDLYRNFYVNHQDVEIMRAL 234
QY 82 FANSTK-----TVEQLKETOAEYLLGIGRGEYDTEYAAQRARIK-----IHDVYLGIG 129

```
Db      235 KSSSIKNIWISYDNDVAIREIKDFRV-----LEYSLOQTAQKKIGEEVIMPSNDV--LI 288
QY      130 PDVYLG 135
Db      289 PNVRLG 294

RESULT 8
US-09-489-039A-8872
; Sequence 8872, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Betton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; PRIOR FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 8872
; LENGTH: 319
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-8872

Query Match      8.9%; Score 83.5; DB 2; Length 319;
Best Local Similarity 25.4%; Pred. No. 0.39;
Matches 51; Conservative 17; Mismatches 72; Indels 61; Gaps 9;

QY      14 RNCIGHALADRIIGDEAEIA-WRLSFTGIDDDTMAALAEQPLF-----EATADLV 65
Db      120 RKNIGVVLFGFTGIDEALAPWR-----DTVLMDRDPGRFASVCYDDEGAILTLM 171
QY      66 TDFYDH-----LESYERTODLFANSTKTVEQLEKETOAEYLLGGRGEYDTE 111
Db      172 QRLYRGHRHISFLGVPVPHSDVTGRRHLAYLAFCCK-HRLPTPALPOLGKMGQ-YDIV 229
QY      112 VAAQPARIGKI--HDVLGLGPDVYLGAYTRYTGLLDAL----- 148
Db      230 ASVLTAEISALVCARDTTLALGASKYLQOQGR-----DALQLASVSGSTPLMKFLHPEILT 283
QY      149 ADDVVAADRGEEAAAVDELVA 169
Db      284 VDPGYAESGRARQLITEQIA 304

RESULT 9
US-10-241-602B-31
; Sequence 31, Application US/10241602B
; Patent No. 6887989
; GENERAL INFORMATION:
; APPLICANT: Simard, Nathalie
; APPLICANT: Brouwers, Huub
; APPLICANT: Griffiths, Steve
; APPLICANT: Valenzuela, Pablo
; APPLICANT: Burzio, Luis
; TITLE OF INVENTION: Sequences from Piscirickettsia salmonis
; FILE REFERENCE: H-32319A
; CURRENT APPLICATION NUMBER: US/10/241,602B
; PRIOR FILING DATE: 2002-09-11
; PRIOR APPLICATION NUMBER: PCT/GB01/01055
; PRIOR FILING DATE: 2001-03-12
; PRIOR APPLICATION NUMBER: GB0005838.8
; PRIOR FILING DATE: 2000-03-11
; PRIOR APPLICATION NUMBER: GB0016080.4
; PRIOR FILING DATE: 2000-07-01
; PRIOR APPLICATION NUMBER: GB0016082.0
; PRIOR FILING DATE: 2000-07-01
; PRIOR APPLICATION NUMBER: GB0018599.1
; PRIOR FILING DATE: 2000-07-29
```

```
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 31
; LENGTH: 640
; TYPE: PRT
; ORGANISM: Piscirickettsia salmonis
US-10-241-602B-31

Query Match      8.9%; Score 83.5; DB 2; Length 640;
Best Local Similarity 20.4%; Pred. No. 1.1;
Matches 38; Conservative 31; Mismatches 92; Indels 25; Gaps 4;

QY      2 SNNDTLVTADVRNG-----IDGHALAD-----RIGDEAEIAWRLSFTGI----- 42
Db      428 AODNOTAVTVYVLOGEREVATGKSLGRFDLADIPPARGMPOVEVTFDIDANGILNVA 487
QY      43 -----DDDTMAALAEQPLFEATDALVTDVFDHLESYERTODLFANSTKVEQLEKETO 97
Db      488 KDKGTGKQSIIVIRASSGLSDDEVDA MIKDAEDHADDDKFKQELVGARNAEAMIHATEK 547
QY      98 EYLLGGRGEYDTEYAAQARATIKIHVVLGSPVYLGAYTRYTGLLDALADVDVADRG 157
Db      548 GKKEAGDVAAADDKTALIEKA-ISELKDVVSGNDKAVIDEKVEALTLQASAKMAEVLVANQG 606
QY      158 EEAATA 163
Db      607 AEAEAA 612

RESULT 10
US-09-605-703B-1396
; Sequence 1396, Application US/09605703B
; Patent No. 6962989
; GENERAL INFORMATION:
; APPLICANT: Pompejus, Markus
; APPLICANT: Kroeger, Burkhard
; APPLICANT: Schroeder, Hartwig
; APPLICANT: Zelder, Oskar
; APPLICANT: Habberhaer, Gregor
; TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING NOVEL
; FILE REFERENCE: BGI-129CP
; CURRENT APPLICATION NUMBER: US/09/605,703B
; PRIOR FILING DATE: 2000-06-27
; PRIOR APPLICATION NUMBER: 60/142,764
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: 60/152,318
; PRIOR FILING DATE: 1999-09-03
; NUMBER OF SEQ ID NOS: 2934
; SEQ ID NO 1396
; LENGTH: 831
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-09-605-703B-1396
```

```
Query Match      8.8%; Score 82.5; DB 2; Length 831;
Best Local Similarity 25.4%; Pred. No. 2.1;
Matches 46; Conservative 25; Mismatches 81; Indels 29; Gaps 8;

QY      7 TLVTADVNGIDGHALADRIIGDEAEIAWRLSFTGIDDDTMAALAEQPLFEATADALVT 66
Db      486 TLVA--VENG-----QLDQHQRDYEV--RAMYALANDRSULIELARDGL-----DNKDS 532
QY      67 DFYHLESYERTODLFANSTKTVEQLEKETOAEYLLGGRGEY-DTEYAAQPARIGKINDV 125
Db      533 EFEYVYRAIERDRDMAGDOQVSEBERRQQLQOEYEAAREBYVWAKIAQREYDNRH-- 590
QY      126 LGLGP--DVYLGAYTRYTGLLDALADVV-----ADRGEEAAAVDELVAFLPML 175
Db      591 ---WPRHTASLEAVGERLISLRDRTIEDYTAAMNLTLPARAGERRANNAESR1IIDLRFIV 647
QY      176 K 176
```

Db 648 E 648

RESULT 11

US-10-622-064-28
 ; Sequence 28, Application US/10622064
 ; Patent No. 6932971
 ; GENERAL INFORMATION:
 ; APPLICANT: Bachmann, Martin F
 ; APPLICANT: Maurel, Patrick F
 ; TITLE OF INVENTION: Hapten-Carrier Conjugates and Uses Thereof
 ; FILE REFERENCE: 1700.0300001
 ; CURRENT APPLICATION NUMBER: US/10/622,064
 ; CURRENT FILING DATE: 2003-07-18
 ; PRIOR APPLICATION NUMBER: US 60/396,575
 ; PRIOR FILING DATE: 2002-07-18
 ; NUMBER OF SEQ ID NOS: 33
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 28
 ; LENGTH: 329
 ; TYPE: PRF
 ; ORGANISM: Bacteriophage SP
 US-10-622-064-28

Query Match 8.8%; Score 82; DB 2; Length 329;
 Best Local Similarity 24.5%; Pred. No. 0.61;
 Matches 39; Conservative 17; Mismatches 61; Indels 42; Gaps 6;

QY 37 LSFTGDDDTMALAEQPLFEATADALVTFDHLSEYRTQDLFANS-----T 86
 Db 93 LSFTSYSTBERLIRTE-LAALLADPLVDALDNLNPMYALLVASSGGGNDPSDDPV 151
 QY 87 KTYEQLKETQAEYLIGRGSEYDTEYAQRARIGKIHVGLG-PDVLGAYTRYTGILL 145
 Db 152 PVPDPVKPPD-----GTCRYKCPACY--RIGSLYEVGKESPDII----- 190
 QY 146 DALADVVADRGEEAAAANDELVARFLPMLKLTFFDQOI 184
 Db 191 -----ERGDSESVTFDVALDEDFLGNMNMWQRL 220

RESULT 12
 US-09-252-991A-21396
 ; Sequence 21396, Application US/09252991A
 ; Patent No. 6551795
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc J. Rubenfield et al.
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
 ; FILE REFERENCE: 107196.136
 ; CURRENT APPLICATION NUMBER: US/09/252,991A
 ; CURRENT FILING DATE: 1999-02-18
 ; PRIOR APPLICATION NUMBER: US 60/074,788
 ; PRIOR FILING DATE: 1998-02-18
 ; PRIOR APPLICATION NUMBER: US 60/094,190
 ; PRIOR FILING DATE: 1998-07-27
 ; NUMBER OF SEQ ID NOS: 33142
 ; SEQ ID NO 21396
 ; LENGTH: 542
 ; TYPE: PRF
 ; ORGANISM: Pseudomonas aeruginosa
 US-09-252-991A-21396

Query Match 8.8%; Score 82; DB 2; Length 542;
 Best Local Similarity 25.3%; Pred. No. 1.3;
 Matches 49; Conservative 19; Mismatches 66; Indels 60; Gaps 8;

QY 3 NNDTLVTADVNGIDGHALADRIGLDEAIAWRLSFTGIDDTMALAEQPLFEATAD 62
 Db 149 NENDTVTVDLIRFG-----DNDTLALVAN--LVEADLL 180
 QY 63 ALVTD---FVDHLESYRTQDLFANSKTYEQLKETQAEYLIGRGSEYDTEYAQR--A 117

Db 181 VILTRDGMFDADPRNNPDQLIYEARADDPQDLAVAGSAGALRGGMQTLRAARILAA 240
 QY 118 RIGKIHVGLGCPDVLGAYTRYTGILLDALADVVAA-----DRGEAAAANDEL 167
 Db 241 RSG-----GHTYIVG-----GRIERYLDRLAGERIGTLTLPDRSRPAAR--KOW 283
 QY 168 VARFLPMLKLTFFD 181
 Db 284 LAGHLQMGKTLVLD 297

RESULT 13

US-09-252-991A-30019
 ; Sequence 30019, Application US/09252991A
 ; Patent No. 6551795
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc J. Rubenfield et al.
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
 ; FILE REFERENCE: 107196.136
 ; CURRENT APPLICATION NUMBER: US/09/252,991A
 ; CURRENT FILING DATE: 1999-02-18
 ; PRIOR APPLICATION NUMBER: US 60/074,788
 ; PRIOR FILING DATE: 1998-02-18
 ; PRIOR APPLICATION NUMBER: US 60/094,190
 ; PRIOR FILING DATE: 1998-07-27
 ; NUMBER OF SEQ ID NOS: 33142
 ; SEQ ID NO 30019
 ; LENGTH: 1253
 ; TYPE: PRF
 ; ORGANISM: Pseudomonas aeruginosa
 US-09-252-991A-30019

Query Match 8.7%; Score 81.5; DB 2; Length 1253;
 Best Local Similarity 22.5%; Pred. No. 5.1;
 Matches 48; Conservative 31; Mismatches 75; Indels 59; Gaps 11;

QY 2 SUNDTLVTAD--VRNGIDGHALADRIGLDEAIAWRLSFTGIDDTMALAEQPLFEAT 60
 Db 1024 SGHDHQLHAEPFLEHALDDE--DRRLGVEGVE-----DGLDDQDVGA-----AFDQA 1068
 QY 61 ADALVTFDHLSEYRTQDLF-----ANSTKYEQLEKETOAEYLLIGL 104
 Db 1069 AGRLDVVLHOFVEGDVAVAVGNVRKAGAAAGRAHADDEARLVRLGLRVRHILAGQA 1128
 QY 105 RGEYDTEYAQRARIGKIHVGLG-----PDVLGAYTRYTGILLDALADVVAA 154
 Db 1129 R-PFEVEFVGQR-----LNAVVGILGGLGVEGVGLSDVAGV---EVGLLDGL-DHVRA 1177
 QY 155 DRGEAAA-----VDELVARFLPMLKLTFFD 181
 Db 1178 AQQOEYVVAFHVARPVGALAAVAVGLFOLVALD 1210

RESULT 14
 US-09-252-991A-19384
 ; Sequence 19384, Application US/09252991A
 ; Patent No. 6551795
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc J. Rubenfield et al.
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
 ; FILE REFERENCE: 107196.136
 ; CURRENT APPLICATION NUMBER: US/09/252,991A
 ; CURRENT FILING DATE: 1999-02-18
 ; PRIOR APPLICATION NUMBER: US 60/074,788
 ; PRIOR FILING DATE: 1998-02-18
 ; PRIOR APPLICATION NUMBER: US 60/094,190
 ; PRIOR FILING DATE: 1998-07-27
 ; NUMBER OF SEQ ID NOS: 33142
 ; SEQ ID NO 19384
 ; LENGTH: 700
 ; TYPE: PRF

; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-19384

Query Match 8.6%; Score 80.5; DB 2; Length 700;
Best Local Similarity 24.6%; Pred. No. 2.8;
Matches 49; Conservative 21; Mismatches 82; Indels 47; Gaps 8;

```
QY 12 DVNRNGIDGHALADRIGLDEAEIAMRLSFTGIDDDTMAALAEOPLEFATADALV---TDF 68
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 129 DARRPADAHFVVGQRAAF-QATLAQR-----QTVATTAAGQRLALAAAGDVAAQHRTOY 180
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 69 YDHLSEYERTODLFANSTKTVEQLKETQAEYLLGLRGEYDTEYAAQRAIGKI-HDIVLG 127
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 181 AEHQODEQHAEBHLDDVPEPRLRVERNAVDLFLGRGERVDHADVAAGVVAHRVL- 239
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 128 LGPDVYLGAITYTYTGLDALAD-----DV-----VADGEE- 159
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 240 -----YQAGEARQFVGAPGLVADLAGLRYDLHLVVOHHRROSQAQSLLLGLGADRAVOF 294
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 160 -AAAAVDELVARFLPMLKL 177
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 295 VVAGGLVALVGRVRRQLRL 313
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
```

RESULT 15
US-09-252-991A-32970
; Sequence 32970, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 32970
; LENGTH: 553
; TYPE: PRF
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-32970

Query Match 8.6%; Score 80; DB 2; Length 553;
Best Local Similarity 21.1%; Pred. No. 2.2;
Matches 41; Conservative 28; Mismatches 79; Indels 46; Gaps 5;

```
QY 20 HALADRI-----GLDEAEIAMRLSFTGIDDDTMAALAEOPLEFATADALVTFDYDHLDES 74
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 137 HAPAPRLIVSAPFLDPAVGLAVGAVGLVDEVVAQAGRPRLSPFAESAEQRYVHRAA 196
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 75 YERTODLFANSTKTVEQLKETQAE-----YLLGLRGEYDTEYAAQ-----RARIGK-- 121
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 197 LHALQOFLDQGLVLRGDAQADRAHQVLEVGLVESQEQVEAGAQDFVNHQNRQRLGQGG 256
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 122 -----IHDVL-----GLGPDVYLGAITYTYTGLDALADVV 153
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 257 QVPMGDRYLVAAGVAGVAVADVIGVEIVEGVGPFVVEGNAEDRHVVGVNHRVAEALIG 316
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 154 ADGGEFAAAVDEL 167
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 317 LPAGDEFGVALDDL 330
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Search completed: November 23, 2005, 04:51:24
UDB time : 23.0446 secs


```

; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(5353)B
; CURRENT APPLICATION NUMBER: US/10/767,701
; CURRENT FILING DATE: 2004-01-29
; NUMBER OF SEQ ID NOS: 63128
; SEQ ID NO 34787
; LENGTH: 138
; TYPE: PRT
; ORGANISM: Sorghum bicolor
; FEATURE:
; OTHER INFORMATION: Clone ID: SORBI-28MAY03-C54418_1.pcp
US-10-767-701-34787

Query Match
Best Local Similarity 10.5%; Score 97.5; DB 4; Length 138;
Matches 28; Conservative 26; Mismatches 57; Indels 5; Gaps 2;

QY 27 GIDDEIARLSFTGIDDDT---MALLAEQPLFEATADALVTDYFDHLESYERTQDLF 82
DB 3 GMDKAEDEPPTCISVQKGTGKVMDALEQDALLKTKTSLLVPSVLNHHDDIPGEADYV 62
QY 83 ANSTVEQLKETQAEVYLLGLRGEYDTEVAAQARARIGKHIDVGLGPVYLGAYT 138
DB 63 MALNTLSEETTESFQF-KNQGVPAPSPFNAEPQVGAINDIVPQCPSYVADFT 117

RESULT 3
US-10-369-493-18563
; Sequence 18563, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 18563
; LENGTH: 883
; TYPE: PRT
; ORGANISM: Halobacterium sp. NRC-1
US-10-369-493-18563

Query Match
Best Local Similarity 10.1%; Score 94.5; DB 4; Length 883;
Matches 51; Conservative 23; Mismatches 63; Indels 43; Gaps 10;

QY 12 DVNRGIDGH--ALADRIGDEAEIARLSFTGIDDDTMAALAEQPLFEA-----TVD 62
DB 180 DVKSNVEGQLDLAQIDA--DKKADPHDRLASHNTALAEVADIEHFFAEERQAROTRD 237
QY 63 ALVTPEYDHLSEYERQDIFANSTKTVEQLKETQAEVYLLGLRGEYDTEVAAQARA----- 117
DB 238 ----DAADVLERYESRTALADVEETIADVREAVH-----AEERETTLADRVSDHRE 286
QY 118 RIGKTHDV-----LGL-GPDVYLGAVTRYTGLLDALAD--DVVADRGEEBAAAVDEL 167
DB 287 RASDLDDEAALAAADGLDDPDADASABR-----DAVADQREAVAEKREVAAPVSRLL 340

RESULT 4
US-10-156-761-9281
; Sequence 9281, Application US/10156761

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; Publication No. US20030119018A1
; GENERAL INFORMATION:
; APPLICANT: OMURA, SATOSHI
; APPLICANT: IKEDA, HARUO
; APPLICANT: ISHIKAWA, JUN
; APPLICANT: HORIKAWA, HIROSHI
; APPLICANT: SHIBA, TADAYOSHI
; APPLICANT: SAKAKI, YOSHIYUKI
; APPLICANT: HATTORI, MASAHIRA
; TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
; FILE REFERENCE: 249-262
; CURRENT APPLICATION NUMBER: US/10/156,761
; CURRENT FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: JP 2001-204089
; PRIOR FILING DATE: 2001-05-30
; PRIOR APPLICATION NUMBER: JP 2001-272697
; PRIOR FILING DATE: 2001-08-02
; NUMBER OF SEQ ID NOS: 15109
; SEQ ID NO 9281
; LENGTH: 218
; TYPE: PRT
; ORGANISM: Streptomyces avermitilis
US-10-156-761-9281

Query Match
Best Local Similarity 10.1%; Score 94; DB 4; Length 218;
Matches 47; Conservative 22; Mismatches 73; Indels 22; Gaps 8;

QY 21 ALADRIGDEAEI--AMLSF--TGIDDDTMAALAEQPLFEATADALVTDYFDHLESYER 77
DB 25 ALADRLGVAAHAEVDPVGRLSVASGVPEPVVALLSGRAGEPDIOA--RFLQRLDLRR 81
QY 78 TODLFANSTKVEQ-----LKETQAEVYLLGLRGEYDTEVAAQARARIGKHID--VLGL 128
DB 82 TR-LKENRRRYTQDIADGAGKSRQAGALIN-GDRRTMHCHDAIQRFVYHAGFLTAE 139
QY 129 GPDVYLGAVTRYTGLLDALADDDVADRGEEBAAAVDELVARFL 172
DB 140 DPEALAGTLGRSBOELLQQL-----ADRRRAAAAVDDPLERLL 178

RESULT 5
US-10-156-761-13480
; Sequence 13480, Application US/10156761
; Publication No. US20030119018A1
; GENERAL INFORMATION:
; APPLICANT: OMURA, SATOSHI
; APPLICANT: IKEDA, HARUO
; APPLICANT: ISHIKAWA, JUN
; APPLICANT: HORIKAWA, HIROSHI
; APPLICANT: SHIBA, TADAYOSHI
; APPLICANT: SAKAKI, YOSHIYUKI
; APPLICANT: HATTORI, MASAHIRA
; TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
; FILE REFERENCE: 249-262
; CURRENT APPLICATION NUMBER: US/10/156,761
; CURRENT FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: JP 2001-204089
; PRIOR FILING DATE: 2001-05-30
; PRIOR APPLICATION NUMBER: JP 2001-272697
; PRIOR FILING DATE: 2001-08-02
; NUMBER OF SEQ ID NOS: 15109
; SEQ ID NO 13480
; LENGTH: 400
; TYPE: PRT
; ORGANISM: Streptomyces avermitilis
US-10-156-761-13480

Query Match
Best Local Similarity 9.6%; Score 89.5; DB 4; Length 400;
Matches 36; Conservative 16; Mismatches 66; Indels 17; Gaps 5;

QY 42 IDDDTMAALAEQPLFEATADALVTDYFDHLESY--ERTQDLFANSTKVEQLKETQAEY 99

```

```

Db      2 LSEQAATVATPLPVGAAVGEITARFYDRFLFAARPELLRDLFNNG----NQAAGTQQA 57
      100 LIG--LGRGEYDTEYAQAQA-----RIGKIDVILGIDPVYIGAYTRYTGILLDALDDV 152
      58 LAGSIAAFATYLVHEDERDPAMLDRIAKHSLGIAFGQYAVVHEHFLAAIAEVLGDAV 117
QY      153 VADRGEEAAAANDEL 167
      118 T----PEVAAAAMDEV 128
Db

RESULT 6
US-10-732-923-10618
; Sequence 10618, Application US/10732923
; Publication No. US20050108791A1
; GENERAL INFORMATION:
; APPLICANT: Edgerton, Michael D
; TITLE OF INVENTION: TRANSGENIC PLANTS WITH IMPROVED PHENOTYPES
; FILE REFERENCE: 38-15(52796)C
; CURRENT APPLICATION NUMBER: US/10/732,923
; CURRENT FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: 10/310,154
; PRIOR FILING DATE: 2002-12-04
; NUMBER OF SEQ ID NOS: 24149
; SEQ ID NO 10618
; LENGTH: 400
; TYPE: PRT
; ORGANISM: Streptomyces avermitilis MA-4680
US-10-732-923-10618

Query Match
Best Local Similarity 26.7%; Score 89.5; DB 5; Length 400;
Matches 36; Conservative 16; Mismatches 66; Indels 17; Gaps 5;

QY      42 IDDDTMAALAAEPLPEATADALVTDPYHLESY--ERTODLPANSTKYVEQLKETQAEY 99
      2 LSEQAATVATPLPVGAAVGEITARFYDRFLFAARPELLRDLFNNG----NQAAGTQQA 57
Db      100 LIG--LGRGEYDTEYAQAQA-----RIGKIDVILGIDPVYIGAYTRYTGILLDALDDV 152
      58 LAGSIAAFATYLVHEDERDPAMLDRIAKHSLGIAFGQYAVVHEHFLAAIAEVLGDAV 117
QY      153 VADRGEEAAAANDEL 167
      118 T----PEVAAAAMDEV 128
Db

RESULT 7
US-10-282-122A-66025
; Sequence 66025, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23

Db      2 LSEQAATVATPLPVGAAVGEITARFYDRFLFAARPELLRDLFNNG----NQAAGTQQA 57
      100 LIG--LGRGEYDTEYAQAQA-----RIGKIDVILGIDPVYIGAYTRYTGILLDALDDV 152
      58 LAGSIAAFATYLVHEDERDPAMLDRIAKHSLGIAFGQYAVVHEHFLAAIAEVLGDAV 117
QY      153 VADRGEEAAAANDEL 167
      118 T----PEVAAAAMDEV 128
Db

RESULT 8
US-10-282-122A-65364
; Sequence 65364, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 66025
; LENGTH: 505
; TYPE: PRT
; ORGANISM: Neisseria meningitidis
US-10-282-122A-66025

Query Match
Best Local Similarity 25.7%; Score 88; DB 4; Length 505;
Matches 46; Conservative 24; Mismatches 69; Indels 40; Gaps 7;

QY      6 DTLVTADVNGIDGHALDRIGLDEAEIARMLSF---TGIDDTMAALAAEPLF----- 57
      325 DQLALALIGSGGNVNLASDLTG-----WQINIMTSABADRNNAEDDAIRLLFMDHLN 377
Db      58 --EATPDALVTDPYHLE--SYERTODLPANSTKYVEQLKETQAEYTLGIGGEYDTEYA 113
      378 VDEETADVIVOGFATLEEVAAVPAAEELTA-----IEGFEDEIVMLRNRRARDAILITMAI 432
QY      114 AQRARIGKIDVPL---GLGPDVYIGAYTRYTGILLDALDDVVADRGEEAAAANDEL 168
      433 AAEKLGSEVSDMRNLEGIDAD-----MIRSLAEGITTRDDLAEIADVDEL 479
Db

RESULT 9
US-10-282-122A-65364
; Sequence 65364, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09

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; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: Patent version 3.1
; SEQ ID NO 65364
; LENGTH: 496
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-282-122A-65364

Query Match 9.3%; Score 87; DB 4; Length 496;
Best Local Similarity 25.7%; Pred. No. 5.9;
Matches 46; Conservative 24; Mismatches 69; Indels 40; Gaps 7;

QY 6 DTLVTADVNRNGIDGHALDRIGLDEAEIAMRLSF--TGIDDTMAALAEQPLF----- 57
DB 316 DRLALAIGRGGQNVRLASDLTG-----MQLNMTSAEADERNNAEDDAIRLPMNHLN 368
QY 58 --EATADALVTDYFYHLE--SYERTODLFANSTKIVEQLKETQAEYLLGLGGEYDTXA 113
DB 369 VDEEFDADVLYVQGFATLEEVAAVPAAEILIA-----IEGFDEIIVMLRNRRADAILTMAI 423
QY 114 AQRARIKIHVDL-----GLGPDVYLGAAYTRYTGLLDALADVVDGRGEAAAVDELY 168
DB 424 AAEEKLGEVSDMRNLBEGVDADMIL-----SLAEGITTRDDLAEALADELI 470

RESULT 9
US-10-848-111-14
; Sequence 14, Application US/1084811
; Publication No. US20040235107A1
; GENERAL INFORMATION:
; APPLICANT: Rosenberg, Eugene
; APPLICANT: Ron, Elisora
; APPLICANT: Orr, Elisora
; APPLICANT: Patlan, Yossi
; TITLE OF INVENTION: GENE CLUSTER
; FILE REFERENCE: 27757
; CURRENT APPLICATION NUMBER: US/10/848,111
; CURRENT FILING DATE: 2004-05-19
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Patent version 3.2
; SEQ ID NO 14
; LENGTH: 318
; TYPE: PRT
; ORGANISM: Myxococcus xanthus
US-10-848-111-14

Query Match 9.3%; Score 86.5; DB 5; Length 318;
Best Local Similarity 26.4%; Pred. No. 3.7;
Matches 34; Conservative 15; Mismatches 55; Indels 25; Gaps 3;

QY 73 ESEYRTODLFANSTKIVEQLKETQAEYLLGLGGEYDTXAQRARIKIHVL----- 126
DB 22 QSYFPAKELFTDTQTFKRLLEDEQFKORLHSHIIRIYDARAALDPLDVLVSFPAT 81
QY 127 -----GLGPDVYLGAAYTRYTGLLDALADVVDGRGEAAAVDELYVAPL 172
DB 82 FWEIHALARLLDRGIGPDAAVVGASNGEVAAL--AIAAGISVDAVALVAQAQLFARFA 139
QY 173 P---MKILL 178
DB 140 PRGMLAVL 148

RESULT 10
US-10-437-963-137315
; Sequence 137315, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 137315
; LENGTH: 362
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_3880C.1.pep
US-10-437-963-137315

Query Match 9.2%; Score 86; DB 4; Length 362;
Best Local Similarity 26.4%; Pred. No. 5;
Matches 51; Conservative 20; Mismatches 78; Indels 44; Gaps 9;

QY 8 LVTADVNRNGIDGHALDRIGLDEAEIAMR-----LSFT--GIDDDTMAALAEQPLFEXTA 61
DB 26 ILADESGTIGKRLAS--IGVENVENRRALRELLFAPGALDCLSGVILFEETLYOSTR 84
QY 62 DALVTDFYDLESY-----ERTODLFANSTKIVEQLKETQAEYLLGLGGEYDTXY 112
DB 85 DG--TPFVDVLAAGVLAGIKVDKGYELACTDRETTTQGHID-----GLGSRCHRY 133
QY 113 AAQRARIKIHVDYGLG-----PDVYLGAATRY-----YTGLLDALADVVD-- 155
DB 134 YAAGARFPAKRWAVLISGRASSRPSQLADVANAQGLARYAIIQENGLVPIVEPELVDE 193
QY 156 RGEAAAVDELY 168
DB 194 HGERCAEVTERTV 206

RESULT 11
US-10-282-122A-66108
; Sequence 66108, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haeselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judyth
; APPLICANT: Wall, Daniel
; APPLICANT: Twilick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELTRA 034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848


```

PRIORITY FILING DATE: 2000-05-23
PRIORITY APPLICATION NUMBER: 60/207,727
PRIORITY FILING DATE: 2000-05-26
PRIORITY APPLICATION NUMBER: 60/230,335
PRIORITY FILING DATE: 2000-09-06
PRIORITY APPLICATION NUMBER: 60/230,347
PRIORITY FILING DATE: 2000-09-09
PRIORITY APPLICATION NUMBER: 60/242,578
PRIORITY FILING DATE: 2000-10-23
PRIORITY APPLICATION NUMBER: 60/253,625
PRIORITY FILING DATE: 2000-11-27
PRIORITY APPLICATION NUMBER: 60/257,931
PRIORITY FILING DATE: 2000-12-22
PRIORITY APPLICATION NUMBER: 60/267,636
PRIORITY FILING DATE: 2001-02-09
PRIORITY APPLICATION NUMBER: 60/269,308
PRIORITY FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 66108
/
LENGTH: 2703
/
TYPE: PRF
/
ORGANISM: Neisseria meningitidis
US-10-282-122A-66108

```

Query Match	9.1%;	Score 85;	DB 4;	Length 2703;
Best Local Similarity	23.5%;	Pred. No. 88;	Mismatches	71; Indels 72; Gaps 9;
Matches	52;	Conservative	26;	
Oy	3	NDNDPLTVADVRNCGIDGHAL-----ADRIGLDEAEIAMRLSFTGIDDDT-----	46	
Db	2153	SDGDS-KNSTRRSGVNTNINHITDEAGQLARGRRAKREANI-YTGIDTETADQHSGL	2210	
Oy	47	-----MAALAAEQPLFE-----ATADALVTDFYDHLSEYERTODLFANSTYVEQ	91	
Db	2211	KNSFDKDAVAKENINLQREYTKFEGRNAQAQVAADVADKLNTQSYERYGEA---RTLLAE	2267	
Oy	92	LKEIQAETLLGLRGSEYDEYVAAQAARIGKIHDL-----GLGPDVYIGAYT	138	
Db	2268	LQNTDSE-----AEKAAPFASISIQVAAYLAENQSRDYTWKEGGISILHGAAG	2316	
Oy	139	RYTGLDLAL-----ADDPVADRGEEAAAAYDEL	167	
Db	2317	GLTTSLSGGIILAGGTSIAAPYLDKRAENLGPAGKAAVVAL	2357	
RESULT 12				
US-10-425-115-287808				
Sequence 287808, Application US/10425115				
Publication No. US20040214272A1				
GENERAL INFORMATION:				
APPLICANT: La Rosa, Thomas J.				
APPLICANT: Kovalic, David K.				
APPLICANT: Zhou, Yihua				
APPLICANT: Cao, Yongwei				
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with				
TITLE OF INVENTION: Plants				
FILE REFERENCE: 38-21(5322)B				
CURRENT APPLICATION NUMBER: US/10/425,115				
CURRENT FILING DATE: 2003-04-28				
NUMBER OF SEQ ID NOS: 369326				
SEQ ID NO 287808				
LENGTH: 163				
TYPE: PRT				
ORGANISM: Zea mays				
FEATURE:				
OTHER INFORMATION: Clone ID: MRT4577_25575C.1.pep				
US-10-425-115-287808				
Query Match	9.0%;	Score 84;	DB 4;	Length 163;
Best Local Similarity	25.6%;	Pred. No. 2.8;	Mismatches	43; Indels 22; Gaps 5;
Matches	31;	Conservative	25;	

```
QY      58 EAFAADLAVNDF-YDHLSEYERTQDLFANSTKTVBLAKE-----TQAETLLGIGRGEYD 109
        :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
Db      46 KAMSDAPITAYARHSHSLCTMGDDDMF-SSDISBDQLRORLGHMSTTCQCIFYFSNG-DEIV 103
        :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
QY      110 TEVAAQRARIKIHVDVLGLGPDVLYLGAVTRYVTGLDALADDVVADRGEAEAAAVIDELVA 168
        :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
Db      104 PEIVVDREALVDRLCRALGAKEVEI-----EMGNHALSNRYQEALVAIVDPVK 151
        :|::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
QY      170 R 170
        |
Db      152 R 152
```

```

RESULT 13
US-10-425-115-287807
; Sequence 287807, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongmei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 287807
; LENGTH: 258
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MRR4577_25574C.1.pep
US-10-425-115-287807

```

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Query Match Similarity      9.0%; Score 84; DB 4; Length 258;
Beet Local Similarity     25.6%; Pred. No. 5.1;
Matches    31; Conservative   25; Mismatches    43; Indels    22; Gaps    5.

QY      58 EATADALVTDF-YDHLSESYERTODL.FANSTYTVBOLKE-----TOAEVLLGLGRGYD 109
       :|::||::||::||::||::||::||::||::||::||::||::||::||::||
DB      141 KANSAPITAYRSHSLCSYMGDDDMWF--SSDLSEPOLRLGHWMTTCCOVFFSMG-DEYV 198
       ||::||::||::||::||::||::||::||::||::||::||::||::||

QY      110 TEYAQRARICKINDVLGLRPDYVLGATRYYTGILLADVDVAAREGEAAAVDELVA 169
       ||::||::||::||::||::||::||::||::||::||::||::||::||
DB      199 PEYWDKRALVRLCRALGGAERVEL-----EMGNHALSNRVOEAVVALVDYVK 246
       ||::||::||::||::||::||::||::||::||::||::||::||::||

QY      170 R 170
Db      247 R 247

RESULT 14
US-10-156-761-11335
; Sequence 11335, Application US/10156761
; Publication No. US20030119018A1
; GENERAL INFORMATION:
; APPLICANT: OMURA, SATOSHI
; APPLICANT: IKEDA, HARUO
; APPLICANT: ISHIKAWA, JUN
; APPLICANT: HORIKAWA, HIROSHI
; APPLICANT: SHIBA, TADAYOSHI
; APPLICANT: SAKAKI, YOSHIYUKI
; APPLICANT: HATTORI, NASAHIRA
; TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
; FILE REFERENCE: 249-262
; CURRENT APPLICATION NUMBER: US/10/156,761
; CURRENT FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: JP 2001-204089
; PRIOR FILING DATE: 2001-05-30
; PRIOR APPLICATION NUMBER: JP 2001-272697

```

;; PRIOR FILING DATE: 2001-08-02
;; NUMBER OF SEQ ID NOS: 15109
;; SEQ ID NO 11335
;; LENGTH: 258
;; TYPE: PRT
;; ORGANISM: Streptomyces avermitilis
US-10-156-761-11335

Query Match 8.9%; Score 83.5; DB 4; Length 258;
Best Local Similarity 24.1%; Pred. No. 5.7;
Matches 49; Conservative 21; Mismatches 78; Indels 55; Gaps 9;

QY 8 LVTAVRNGIDGHALADRIQDEAEIARLSTFGTIDDTMAALAAEQPLFEXTADALVTD 67
DB 33 VVVAIVLDD-QGEALAKEIARVYHLD-----VGREDDWQAIV-----TVAKD 74
QY 68 FVDHLESEY-----RTODLFANSTKYVEQLKE-TQAEVLLGLGGEYDTEYAAQPARIG 120
DB 75 AVGHIDGLVNNAGIRFNDLVGTPLAEFQIVQVNVGVFLGIKTVAPEIE-AAAGGRTIV 133
QY 121 KIHVDVLGCPDYVLLANT-----RYTGILD-ALADDVVA 154
DB 134 NTASYAGLGMAYVAGAYTAKHAIIVGLTRVALELAKKIRVANAVCPGALDTAMSPSQL 193
QY 155 DRG---EEAAAADDELVARFLPM 174
DB 194 DPGADPEETARALSELVGRIVPL 216

RESULT 15
US-10-282-122A-59961
; Sequence 59961, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1

;; SEQ ID NO 59961
;; LENGTH: 315
;; TYPE: PRT
;; ORGANISM: Klebsiella pneumoniae
US-10-282-122A-59961

Query Match 8.9%; Score 83.5; DB 4; Length 315;
Best Local Similarity 25.4%; Pred. No. 7.4;
Matches 51; Conservative 17; Mismatches 72; Indels 61; Gaps 9;

QY 14 RNSIDGHALADRIQDEAEIARLSTFGTIDDTMAALAAEQPLF-----EATADLV 65
DB 116 RNNIDGVVLFQGTIDEMALAPWR-----DTLVMAARDAPFASVCYDDEGATILM 167
QY 66 TDFYDH-----LESYERTODLFANSTKYVEQLKETQAEVLLGLGGEYDTE 111
DB 168 QRLYDRGHRHISFLGVPHSDVTTGERHRLAYLAFCCK-HRLTPPALPGLMKOG-YDTV 225
QY 112 YAAQRARIGKI---HDVLGCPDYVLYGAYTRYTGILDAL----- 148
DB 226 ASVLTAETSALVCATDTLALGASKYLQOQGR-----DALQLASVSTPLMKFLHPETLT 279
QY 149 ADDVVAADRGEAAAADDELVA 169
DB 280 VDPGYAESGRRAARQLIEQIA 300

Search completed: November 23, 2005, 05:09:02
Job time : 61.1486 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: November 23, 2005, 04:50:08 ; Search time 7.26597 Seconds
(without alignments)
203.984 Million cell updates/sec

Title: US-09-455-978B-2

Perfect score: 2394
Sequence: 1 MSNDNDLVTADVRNGIDGH.....ATDQVRVEVEVETVGLKLS 489

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 17545 seqs, 3030971 residues

Total number of hits satisfying chosen parameters: 17545

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_AA_New:*
1: /cgn2_6/prodata/2/pubppaa/US10_NEW_PUB.pep:*
2: /cgn2_6/prodata/2/pubppaa/US06_NEW_PUB.pep:*
3: /cgn2_6/prodata/2/pubppaa/US07_NEW_PUB.pep:*
4: /cgn2_6/prodata/2/pubppaa/US08_NEW_PUB.pep:*
5: /cgn2_6/prodata/2/pubppaa/US09_NEW_PUB.pep:*
6: /cgn2_6/prodata/2/pubppaa/PCT_NEW_PUB.pep:*
7: /cgn2_6/prodata/2/pubppaa/US11_NEW_PUB.pep:*
8: /cgn2_6/prodata/2/pubppaa/US60_NEW_PUB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	169.5	7.1	1448	1 US-10-485-517-212	Sequence 212, App
2	160	6.7	364	1 US-10-984-376-5	Sequence 5, Appl
3	160	6.7	364	1 US-10-984-376-6	Sequence 6, Appl
4	160	6.7	1279	1 US-10-793-626-3188	Sequence 3188, Ap
5	150.5	6.3	3717	1 US-10-821-234-1076	Sequence 1076, Ap
6	147.5	6.2	691	1 US-10-131-826A-16	Sequence 16, Appl
7	147.5	6.2	703	1 US-10-821-234-963	Sequence 963, App
8	142.5	6.0	667	1 US-10-821-234-1477	Sequence 1477, Ap
9	141	5.9	614	7 US-11-074-176-80	Sequence 80, Appl
10	141	5.9	706	1 US-10-485-517-146	Sequence 146, App
11	140.5	5.9	989	1 US-10-821-234-975	Sequence 975, App
12	139.5	5.8	1586	1 US-10-821-234-901	Sequence 901, App
13	137.5	5.7	1095	1 US-10-793-626-3154	Sequence 3154, Ap
14	134.5	5.6	5024	1 US-10-793-626-2964	Sequence 2964, Ap
15	134	5.6	284	1 US-10-821-234-1632	Sequence 1632, Ap
16	133.5	5.6	1290	1 US-10-485-517-141	Sequence 141, App
17	132.5	5.5	877	7 US-11-074-176-322	Sequence 322, App
18	132.5	5.5	883	7 US-11-074-176-88	Sequence 88, Appl
19	132.5	5.5	1126	7 US-10-485-517-248	Sequence 248, App
20	131.5	5.5	416	1 US-10-793-626-2	Sequence 2, Appl
21	127	5.3	1107	1 US-10-485-517-145	Sequence 145, App
22	126.5	5.3	585	1 US-10-793-626-2124	Sequence 2124, Ap
23	125	5.2	794	1 US-10-793-626-1050	Sequence 1050, Ap
24	124	5.2	875	1 US-10-858-730-7	Sequence 7, Appl
25	123.5	5.2	539	1 US-10-793-626-888	Sequence 888, App

26	120.5	5.0	1189	7 US-11-074-176-134	Sequence 134, App
27	120	5.0	772	1 US-10-858-730-77	Sequence 77, Appl
28	119.5	5.0	1192	1 US-10-858-730-72	Sequence 72, Appl
29	119	5.0	544	1 US-10-821-234-889	Sequence 889, App
30	118.5	4.9	761	1 US-10-485-517-252	Sequence 252, App
31	118.5	4.9	1140	1 US-10-858-730-208	Sequence 208, App
32	118	4.9	718	7 US-11-074-176-306	Sequence 306, App
33	118	4.9	723	7 US-11-074-176-18	Sequence 18, Appl
34	117	4.9	581	1 US-10-793-626-28	Sequence 28, Appl
35	117	4.9	598	7 US-11-082-385-38	Sequence 38, App
36	117	4.9	752	1 US-10-793-626-1036	Sequence 1036, Ap
37	117	4.9	1299	1 US-10-821-234-1145	Sequence 1145, Ap
38	117	4.9	1572	1 US-10-793-626-2906	Sequence 2906, Ap
39	116	4.8	1992	7 US-11-013-759-3	Sequence 3, Appl
40	116	4.8	1992	7 US-11-013-759-13	Sequence 13, Appl
41	116	4.8	2047	7 US-11-013-759-4	Sequence 4, Appl
42	116	4.8	2047	7 US-11-013-759-7	Sequence 7, Appl
43	115.5	4.8	495	1 US-10-821-234-1154	Sequence 1154, Ap
44	115.5	4.8	776	1 US-10-821-234-1171	Sequence 1171, Ap
45	115	4.8	615	1 US-10-982-545-14	Sequence 14, Appl

ALIGNMENTS

```
RESULT 1
US-10-485-517-212
; Sequence 212, Application US/10485517
; Publication No. US20050256299A1
; GENERAL INFORMATION:
; APPLICANT: University of Sheffield
; APPLICANT: Biosynexus Incorporated
; APPLICANT: Foster, Simon
; APPLICANT: Mond, James
; TITLE OF INVENTION: Antigenic Polypeptides
; FILE REFERENCE: P100629W0
; CURRENT APPLICATION NUMBER: US/10/485,517
; CURRENT FILING DATE: 2004-02-02
; PRIOR APPLICATION NUMBER: GB 0118825.9
; PRIOR FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: GB 0200349.9
; PRIOR FILING DATE: 2002-01-09
; NUMBER OF SEQ ID NOS: 424
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 212
; LENGTH: 1448
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
; US-10-485-517-212

Query Match
Best local Similarity 7.1%; Score 169.5; DB 1; Length 1448;
Matches 115; Conservative 95; Mismatches 197; Indels 147; Gaps 26;

QY 11 ADVRNGIDGHALADRLGDEAEIAMLSPFGIDDDPMALAAQPLFEARADLVDFD 70
Db 7 ADDIDNAANDVNATKTTEATIA-----AIPDANVVKPAQAQ-----AD 48
QY 71 HLESYERTODLFANSTKTVE-----QKETOAEYLLGLGRGEYDEYAAQARIGK 121
Db 49 KVAQGETAID--GNNGSTTBKRAAQQOYQTEKTTDAIDAHTNAEVE--AKKAIAK 105
QY 122 IHDVLGIGPDVYLGAATRYTGLLDLADVDVADGEEAAAVDELVARFLPMUKLITFD 181
Db 106 IEAI-----QPATTTKDN--AKKAIAKTKANERTAIQA-----T 137
QY 182 QQTAMDTYIDSYQRHLDELDSROELANAVATHEAPLSLEATSCDVARTDTRARTD 241
Db 138 QDITAEIRIAANA-----DVDNAVTQAN-----SNIEA-----ANSQDVQAKTGENST 183
QY 242 DQ-----VDRAVDARSRTISV--SASVEEVASTAD--DVRRTSEDAEALAOGEA--AADDAL 293
Db 184 DQVTPYVVKKATYARNETITAILNKIKLOEIQATPPTATDEKQADAEANTENGKANQATISAA 243
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QY 294 ATMTDIDBATDGVATGVEBGERADVSVTGVIDI -AEQTNML--ALNASTEARAG- 349
D 244 TTNAQVDEKKANAEEAIAINAVTPEKVKQAKADEIDOLAQTQNVINNDQATTEEKEBAL 303
QY 350 -----EAGEGFVAVADE-----VKALAEESREQ--STRYE 377
D 304 QQLATAVTVDAKNNTIATATDNDGVDAQKADGAKNS IGSTQPATAVKSNAKNDVDQAVTQNG 363
QY 378 ELVEQMGAETETVTOQDDEV-----NQRIAGEVERV-EEAMETLOEIT--DAV 422
D 364 AIDNTTGAATTEEKNAKAKDVLAKAKEKAYDILNAQTNDVTQIKDQAVADIQITADTTI 423
QY 423 EDPAAGMEVSTATDEQA-----VSTEEVAEMVDGYD-----DRAGEIAAALDIA 468
D 424 KDVAR--DELAETKANEQKALIAQTDATATEEKKQANQVDAQCTQGNQNTENNQSIDVN 481
QY 469 DATDOQVRTVEEVR 482
D 482 TAKDNAIAIDPIQ 495

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```

RESULT 2
US-10-984-376-5
; Sequence 5, Application US/10984376
; Publication No. US20050244436A1
; GENERAL INFORMATION:
; APPLICANT: GIULIANI, Marzia Monica
; APPLICANT: PIZZA, Mariagrazia
; APPLICANT: RAPPUOLI, Rino
; TITLE OF INVENTION: COMBINATION NEISSERIAL COMPOSITIONS
; FILE REFERENCE: 2300-1609.20
; CURRENT APPLICATION NUMBER: US/10/984, 376
; PRIOR FILING DATE: 2004-11-09
; PRIOR APPLICATION NUMBER: 09/979, 263
; PRIOR FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: PCT/IB00/00828
; PRIOR FILING DATE: 2000-05-19
; PRIOR APPLICATION NUMBER: GB 9911692.3
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: GB 9919705.5
; PRIOR FILING DATE: 1999-06-19
; PRIOR APPLICATION NUMBER: GB 0005730.7
; PRIOR FILING DATE: 2000-03-09
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.3
SEQ ID NO 5
LENGTH: 364
TYPE: PRT
ORGANISM: Artificial
FEATURE:
OTHER INFORMATION: representative ORF 961 protein
US-10-984-376-5

Query Match          6.7%; Score 160; DB 1; Length 364;
Beat Local Similarity 23.5%; Pred. No. 0.0058;
Matches   67; Conservative    45; Mismatches 119; Indels   54; Gaps   11

236 MRARDDQYDMRADYS-----REISSVSAVSVEVASTADVDVRTSEDAALAQGGA 287
      :|::||::||::||::||::||::||::||::||::||::||::||::||::||
24 LAATSDDDVKKAATAIVAAYANNNGOINGFKAG-ETIYDGGDTITOKDATA---ADV 78
      ::||::||::||::||::||::||::||::||::||::||::||::||::||

288 AADD-----ALATMT-----DIDEATDGVTAGVBOGERADAVESVTGVIDDA 331
      |||::||::||::||::||::||::||::||::||::||::||::||::||
79 EADDPKGIGLKKVVNNLTITVENKNONVDAKYKAASETEIKLTTKLADTDALADTDAAL 138
      :||::||::||::||::||::||::||::||::||::||::||::||::||
332 EOTNNMLNASSIEARAGEGEAFVAVADEVALAESRSEOSTRYVELVEQMQAETEETV 391
      :||::||::||::||::||::||::||::||::||::||::||::||::||
Db 139 DETTN-AIN-----KLGENITTFAEETKTNIYKIDEXLEAVADTVDKHAEAFNDA 188
      :||::||::||::||::||::||::||::||::||::||::||::||::||

Oy 392 DQDEVNORIGEGVERVEEAMTLQETIDAVE-----DASGMQEVSTATDEQAVSTEE 445
      :||::||::||::||::||::||::||::||::||::||::||::||::||
Db 189 DSLDETNNKBADEVATTANEAKOTAETKONVDAKVAATAAGKAAAGTANTTAADKAE 248
      :||::||::||::||::||::||::||::||::||::||::||::||::||

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QY      446 VAEMWDGVDDRAGEIAAALDDIA-----DATDQQVRTV--EEVRE 483
      : | | | | | | | | | | | | | | | | | | | | | | | |
Db      249 A--VAAKTVDIKADIATNKADIAKNSARIDS LDKVNA LKRETRQ 291

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```

RESULT 3
US-10-984-376-6
; Sequence 6, Application US/10984376
; Publication No. US2005024436A1
; GENERAL INFORMATION:
; APPLICANT: GIULINI, Marzia Monica
; APPLICANT: PIZZA, Mariagrazia
; APPLICANT: RAPUOLI, Rino
; TITLE OF INVENTION: COMBINATION NEISSERIAL COMPOSITIONS
; FILE REFERENCE: 2300-1609.20
; CURRENT APPLICATION NUMBER: US/10/984.376
; PRIOR FILING DATE: 2004-11-09
; PRIOR APPLICATION NUMBER: 09/979,263
; PRIOR FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: PCT/IB00/00828
; PRIOR FILING DATE: 2000-05-19
; PRIOR APPLICATION NUMBER: GB 9911692.3
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: GB 9919705.5
; PRIOR FILING DATE: 1999-08-19
; PRIOR APPLICATION NUMBER: GB 0005730.7
; PRIOR FILING DATE: 2000-03-09
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 6
; LENGTH: 364
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: representative ORF 961 protein
US-10-984-376-6

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[illegible]

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; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3188
; LENGTH: 1279
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-3188
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Query Match 6.7%; Score 160; DB 1; Length 1279;

Best Local Similarity 18.1%; Pred. No. 0.023;

Matches 110; Conservative 105; Mismatches 219; Indels 174; Gaps 22;

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QY 2 SNNDITLVADVANGIDGHALADRIGLDEAEIAMRLSFTGIDDDTMAALAEQPLFEATA 61
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 629 ANNQKTLI-----GNDGNATD-----DEKEAKQLVTQKLNQI-----OKIHSTQ 670
QY 62 DALVTFDYDHLSEYERQDLFANSTKTVQ-----LKETOAEYLLGLGRGEYDTEVA 113
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 671 DNOV---DNVKAQATTAITGLINANAHRKODAINILTNLAESKSDI-----RANQDATT 722
QY 114 AGRARIKIHVDVGLGPDVYLGAATRYTGLDALADVDVADRG-----EA 160
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 723 EKRTALQSIDDTLQAQRNNINGANT-----NALVDENLEDGKQKQRIIVLSQRTQQA 775
QY 161 AAAVDELVARFLPMLKLLTDDQIAMDITYIDSAQRHDEIDSRQELANVAHVHAPLS 220
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 776 KADIAQAIGQ-----QRSTIDQONQATTEKQKALERLNDGTNGVNDRIQALAA 824
QY 221 SLKATSG-----DVAERTDTWRARTDDQVD-----R 246
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 825 NQAVTDEKNKITLETIRNVEPIYVVKPKANEIRKKAQEOTLLINQNDATLEKQIALGK 884
QY 247 MADVSR-ISSVS-----ASVEEVASTADVDVRTSEDAALAQ----- 283
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 885 LEEVKEALNQVQASHNNQVKIENNGIAKISEVHPETIIKNAKQEIQDAQSQTDTI 944
QY 284 -----QGEAAADA--LATMTDIDEATDGTAGVQGLGERAAVDESVTYGVIDIAEQ 333
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 945 NANNKSTNEKSAIDIVNNAKIDAINNITNATTQLVNDAKSGNT-SISQLPSTAVK 1003
QY 334 TNNMLANASIEAARAGEGFAVVADEVKALAESEOSTRVELEVEQQAQ--TEETV 391
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1004 TNNL-----AALASPAKKNKAIIDQTPNATAEKEKEANNNKVDRLQEBADANILKHTT 1056
QY 392 DQDEVNQRIQEGEVERY-----EAMETLQELTD-----AVEDAASG--M 429
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1057 DEVNNINQAVNQINNAVQEVIKQNAKQNLQPIDNQKKIENTPPATLEKKEANRL 1116
QY 430 QEVSTATDEQAVSTEEVAEMVDVDRAGEIAA-----ALDDIADTDQVATVE 479
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1117 QNVLTSTSDERIANVDHNNEVDQALDKARPKIEAIVPQVSKKRDALNIAIOEAFNSQTOIEQ 1176
QY 480 EVRETVK 487
DB 1177 EKEQATNE 1184
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RESULT 5

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US-10-821-234-1076
; Sequence 1076, Application US/10821234
; Publication No. US2005025514A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Strache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
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; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pc_seq_genes Version 1.0
; SEQ ID NO 1076
; LENGTH: 3717
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-1076
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Query Match 6.3%; Score 150.5; DB 1; Length 3717;

Best Local Similarity 20.7%; Pred. No. 0.24;

Matches 114; Conservative 87; Mismatches 220; Indels 129; Gaps 22;

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QY 13 VANGIDGHALADRIG-----LDEAEIAMRL-----SFTGIDDDTMAALAEQPLFEFA 59
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 2175 VPGGPVGHSHICEVCHCVLLLDLERAGALLPAIHQRLRGINSMMAMRLHR----- 2229
QY 60 TADALVTDFYDHLSE-----YERTQDLFANSTKTVQELKETOAEYLLGLGRGEYDTEVA 114
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 2230 -LNASTADIQSLRSPGLGRHETAOQL-----EVLQOQSTSLQGDARRLGGQAVGRDQA 2283
QY 115 QARARIKIHVDVGLGPDVYLGAATRYTGL--LDALADVDVADRG-----EAAAADVELV 168
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 2284 SQ-----LLAGTEATLGHAKTLLAARAVDRTLSELMSGTHGLGANSAPGEOQL 2334
QY 169 ARFLPMLKLLTFDQ-----QIAMDITYIDSAQRL-----HDEIDSRQELANVAHVH 216
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 2335 LRTLAVERLLWEMRRARDIGAQAQAQAEAL-AAAGQLLARVQEQSLWEENQALATQTR 2393
QY 217 APLSSLEATSGVAAE--RTDTMR-----ARTDDQVDRMADVREISSVSASVE 262
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 2394 DRLAQHEAGIMDLREALNRAVDATREAOELNSRNCERLEALQKQELSRDNATLQATLH 2453
QY 263 EVASTADVDPR-----TSEDQEAALQGEAAADALATMTDIDBA-----TDGVTAG 309
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 2454 AARDTLASVFRLLHSIDQAKELELERLASLDGARTLLOQMOTFSFAGSKRLVEAEAH 2513
QY 310 VBQLGERAADVESVTGVIDIAEQTNMLANLS-----IEAARAGEAGGFA----- 356
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 2514 AQQLQGLALNTLSI--ILDVNDRLQRAIEMSNAYSRLIQAVQAEDDAAGALQQAQDHT 2571
QY 357 ---VVADEVKALAEBSREGOSTRVEELVEQMAETETVDQDEVNQRIQEGEVEREAME 413
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 2572 WATVVRQGVDRQAQLANSTALEFAMLEQ-----ORLGIWVAALQGART 2617
QY 414 TLQET---TDAVEDAASQGEVSTATDEQAVSTEEVAEMVDVDRAGEIAAALDDIADA 470
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 2618 QLRDVRAKKQGLE-----AHIQAAQAMLAMDTEFSTKI---AAKAVAAEAQDTATR 2667
QY 471 TDQQVTRVEE 480
DB 2668 VQSQQLQMQE 2677
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RESULT 6

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US-10-131-826A-16
; Sequence 16, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
```

APPLICANT: Smith,Victoria
APPLICANT: Stewart,Timothy A.
APPLICANT: Tumas,Daniel
APPLICANT: Watanabe,Colin K
APPLICANT: Wood,William
APPLICANT: Zhang,Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P330R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059122
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See file wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 16
LENGTH: 691
TYPE: PRT
ORGANISM: Homo Sapien
US-10-131-826A-16
Query Match 6.2%; Score 147.5; DB 1; Length 691;
Best Local Similarity 21.3%; Pred. No. 0.055;
Matches 100; Conservative 74; Mismatches 171; Indels 125; Gaps 21;
QY 56 LFEATADALVTFYDHLSEY--ERTODLFANSTKIVEQLKETOAYLLGLGRGEYDEYA 113
DB 50 IFKVEA-ACVRDHYHTFWSSVPESTTD---GSPHITSVQFQASTLPKPAQLYQFRVY 103
QY 114 AQRARIGKIHVDLIGPVDVYGAATRYTGLDALADVDVADGEBAANAVALVARFLP 173
DB 104 NRQCG-----VCGQSP-----PQFRPRPMDELVTLEADGSDI----- 139
QY 174 MKLLTFDQIAMDTYIDSYAQRLLHD-----EIDSR-QEIANAVAT---HV 215
DB 140 ---LLVPRKATVILQNQLDESQGERNDLMQLQLGEGVTELSRVQELERLALATARQEH 196
QY 216 E--APLSLEATSDOVAERTDTMRARTDQVVRMADVSEIISVSASVEVASTADVRR 273
DB 197 ELMEOYKGISRSHGETTEERDILSRQGGDHARILLEDDIQTIS---EKVLTKVEELDR 253
QY 274 TSEDAEALAQCGEAAADALATMTDIDEATDGTAGVEQLGERAADVESVTVIDIAEQ 333
DB 254 LRDYVKALTRREQKL-----LGQLKEVQADKQSEAEEL-QVAQ 291
QY 334 TNMLALNASTIAARAAGEGEPFAVVADEVKALAEBSREGQSTVEELVBMQAFTEETVDO 393
DB 292 ENH-HLNLIDLK-----EAKSWQEQSAQAQRLDKVAQMK-----DT 327
QY 394 LDEVNQRIGEGVERVEAMETLOETIDAVEDAASGMQEVSTATDE---QAVSTEEVAM 449
DB 328 LGQAQORVAE-LEPKELQRAQEL-----AASSQQAATLLGEBELASAAAARDRTIAEL 380
QY 450 -----VDGVDRAGEIAAALDDIADATDQO---VRTVEEVRVETGKLS 489

DB 381 HRSRLVEAVNGRLAELGLHLKEKQWKSERAGLLQSVAEKDKILKLS 430
RESULT 7
US-10-821-234-963
Sequence 963, Application US/10821234
Publication No. US20050255114A1
GENERAL INFORMATION:
APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmeni, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
SOFTWARE: dt_seq_genes Version 1.0
SEQ ID NO 963
LENGTH: 703
TYPE: PRT
ORGANISM: Homo sapiens
US-10-821-234-963
Query Match 6.2%; Score 147.5; DB 1; Length 703;
Best Local Similarity 21.3%; Pred. No. 0.056;
Matches 100; Conservative 74; Mismatches 171; Indels 125; Gaps 21;
QY 56 LFEATADALVTFYDHLSEY--ERTODLFANSTKIVEQLKETOAYLLGLGRGEYDEYA 113
DB 62 IFKVEA-ACVRDHYHTFWSSVPESTTD---GSPHITSVQFQASTLPKPAQLYQFRVY 115
QY 114 AQRARIGKIHVDLIGPVDVYGAATRYTGLDALADVDVADGEBAANAVALVARFLP 173
DB 116 NRQCG-----VCGQSP-----PQFRPRPMDELVTLEADGSDI----- 151
QY 174 MKLLTFDQIAMDTYIDSYAQRLLHD-----EIDSR-QEIANAVAT---HV 215
DB 152 ---LLVPRKATVILQNQLDESQGERNDLMQLQLGEGVTELSRVQELERLALATARQEH 208
QY 216 E--APLSLEATSDOVAERTDTMRARTDQVVRMADVSEIISVSASVEVASTADVRR 273
DB 209 ELMEOYKGISRSHGETTEERDILSRQGGDHARILLEDDIQTIS---EKVLTKVEELDR 265
QY 274 TSEDAEALAQCGEAAADALATMTDIDEATDGTAGVEQLGERAADVESVTVIDIAEQ 333
DB 266 LRDYVKALTRREQKL-----LGQLKEVQADKQSEAEEL-QVAQ 303
QY 334 TNMLALNASTIAARAAGEGEPFAVVADEVKALAEBSREGQSTVEELVBMQAFTEETVDO 393
DB 304 ENH-HLNLIDLK-----EAKSWQEQSAQAQRLDKVAQMK-----DT 339
QY 394 LDEVNQRIGEGVERVEAMETLOETIDAVEDAASGMQEVSTATDE---QAVSTEEVAM 449
DB 340 LGQAQORVAE-LEPKELQRAQEL-----AASSQQAATLLGEBELASAAAARDRTIAEL 392
QY 450 -----VDGVDRAGEIAAALDDIADATDQO---VRTVEEVRVETGKLS 489
DB 393 HRSRLVEAVNGRLAELGLHLKEKQWKSERAGLLQSVAEKDKILKLS 442
RESULT 8
US-10-821-234-1477
Sequence 1477, Application US/10821234
Publication No. US20050255114A1
GENERAL INFORMATION:
APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmeni, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia

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OM protein - protein search, using SW model

Run on: November 23, 2005, 04:37:11 ; Search time 47.9554 Seconds
(without alignments)
843.041 Million cell updates/sec

Title: US-09-455-978b-2

Perfect score: 2394
Sequence: 1 MSNDTDTLVADVRNGIDG.....ATDQVTVVEVREYWKLS 489

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA: *
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2: /cgn2_6/prodata/1/iaa/6_COMB.pep: *
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4: /cgn2_6/prodata/1/iaa/PCITUS_COMB.pep: *
5: /cgn2_6/prodata/1/iaa/RE_COMB.pep: *
6: /cgn2_6/prodata/1/iaa/backfiles1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	412.5	17.2	640	2	US-09-252-991A-23252 Sequence 23252, A
2	401.5	16.8	545	2	US-09-252-991A-31086 Sequence 31086, A
3	398	16.6	663	2	US-09-252-991A-23255 Sequence 23255, A
4	397.5	16.6	906	2	US-09-252-991A-32715 Sequence 32715, A
5	389.5	16.3	696	2	US-09-252-991A-16965 Sequence 16965, A
6	388.5	16.2	897	2	US-09-902-540-15636 Sequence 15636, A
7	385	16.1	710	2	US-09-252-991A-32789 Sequence 32789, A
8	380.5	15.9	734	2	US-09-252-991A-30703 Sequence 30703, A
9	380.5	15.9	857	2	US-09-252-991A-23956 Sequence 23956, A
10	379	15.8	701	2	US-09-252-991A-23288 Sequence 23288, A
11	373.5	15.6	709	2	US-09-328-352-5172 Sequence 5172, Ap
12	373	15.6	614	2	US-09-252-991A-31412 Sequence 31412, A
13	368.5	15.4	573	2	US-09-252-991A-18744 Sequence 18744, A
14	366	15.3	760	2	US-09-252-991A-31724 Sequence 31724, A
15	361	15.1	613	2	US-09-252-991A-25899 Sequence 25899, A
16	360	15.0	529	2	US-09-902-540-14226 Sequence 14226, A
17	359	15.0	579	2	US-09-543-681A-6665 Sequence 6665, A
18	358.5	15.0	611	2	US-09-252-991A-20097 Sequence 20097, A
19	352.5	14.7	563	2	US-09-252-991A-31048 Sequence 31048, A
20	350.5	14.6	521	2	US-09-902-540-11865 Sequence 11865, A
21	349.5	14.6	487	2	US-09-902-540-14739 Sequence 14739, A
22	349	14.6	510	2	US-09-902-540-15074 Sequence 15074, A
23	348.5	14.6	684	2	US-09-252-991A-28604 Sequence 28604, A
24	347	14.5	547	2	US-09-902-540-16229 Sequence 16229, A
25	346.5	14.5	504	2	US-09-252-991A-26180 Sequence 26180, A
26	343.5	14.3	537	2	US-09-252-991A-20929 Sequence 20929, A
27	334.5	14.0	653	2	US-09-252-991A-18264 Sequence 18264, A

28	334	14.0	572	2	US-09-543-681A-8138 Sequence 8138, Ap
29	333	13.9	413	2	US-09-902-540-12315 Sequence 12315, A
30	333	13.9	645	2	US-09-252-991A-16799 Sequence 16799, A
31	331.5	13.8	620	2	US-09-902-540-12224 Sequence 12224, A
32	329.5	13.8	548	2	US-09-252-991A-23147 Sequence 23147, A
33	321.5	13.4	535	2	US-09-543-681A-4593 Sequence 4593, Ap
34	320.5	13.4	670	2	US-09-252-991A-26867 Sequence 26867, A
35	315	13.2	595	2	US-09-543-681A-6908 Sequence 6908, Ap
36	314.5	13.1	559	2	US-09-902-540-11787 Sequence 11787, A
37	313.5	13.1	596	2	US-09-902-540-13814 Sequence 13814, A
38	313	13.1	552	2	US-09-543-681A-8191 Sequence 8191, Ap
39	313	13.1	680	2	US-09-252-991A-26639 Sequence 26639, A
40	301.5	12.6	482	2	US-09-902-540-16520 Sequence 16520, A
41	295	12.3	520	2	US-09-902-540-11891 Sequence 11891, A
42	294	12.3	506	2	US-09-902-540-10933 Sequence 10933, A
43	292.5	12.2	531	2	US-08-976-063E-34 Sequence 34, Appl
44	292.5	12.2	556	2	US-09-902-540-13058 Sequence 13058, A
45	288.5	12.1	449	2	US-09-902-540-13188 Sequence 13188, A

ALIGNMENTS

RESULT 1
US-09-252-991A-23252

/ Sequence 23252, Application US/09252991A

/ Patent No. 6551795

/ GENERAL INFORMATION:

/ APPLICANT: Marc J. Rubenfeld et al.

/ TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

/ FILE REFERENCE: 107196.136

/ CURRENT APPLICATION NUMBER: US/09/252,991A

/ PRIOR FILING DATE: 1999-02-18

/ PRIOR APPLICATION NUMBER: US 60/074,788

/ PRIOR FILING DATE: 1998-02-18

/ PRIOR APPLICATION NUMBER: US 60/094,190

/ NUMBER OF SEQ ID NOS: 33142

/ SEQ ID NO 23252

/ LENGTH: 640

/ TYPE: PRT

/ ORGANISM: Pseudomonas aeruginosa

/ US-09-252-991A-23252

Query Match 17.2%; Score 412.5; DB 2; Length 640;
Best Local Similarity 24.4%; Pred. No. 1.1e-24;
Matches 149; Conservative 97; Mismatches 199; Indels 165; Gaps 19;

QY	7	TLVTADVRNGIDG----	HALADRIQL-----	DEAETAMRLSTGTGIDDTMAALAAEQPLF	57
DB	59	TLVPSNIGSWLBERMHLVEGLASQLALDQPDDEANJAROL-----	EQPVF	103	
QY	58	-----EATADALVDFVDHL--	ESYE--RQDDLFANS-----	TKTVEQ	91
DB	104	SRNFASVYIGEAASGFTFMKPPYAMPEGYDPRTRAWYKOLAAADRLITVEPFVADAGTGEQ	163		
QY	92	-----LKEQAEYVLGIGRGEVDTE-----	YAAQPARIKTI--	HDVYGL-	128
DB	164	ILTMSLPLVRRAAGDGLVGAAGDKLFTLTALINSLKFDGAGYATLVSDAGKILHPSPGLV	223		
QY	129	-----GPDVYIKAV-----	TRYTGLID-----		146
DB	224	LKTLIAEAYPKGAINIVPGVHEVLDRSQSFSEFPYKGLPGVTWYVALVYDRDTAYSMLS	283		
QY	147	-----LADLVVA-----	DRG-----	BEAAAVDELVARFLPMKTL	178
DB	284	EFTTSALVATLIVGVGIMLLGMLIRYVLOPLTDMGRAMODIAGSGDLTKR-----	LKVT	339	
QY	179	TFPQOIAMDTYIISYARLHDEIDSRQELANAVATHEAPLSLEATSQDVAERTDTMRA	238		
DB	340	SNDEFGTLANAFRRFVERIHESI--	REVAGTA-----	RQLHDVAQLVVAANSMSMA	368

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QY 239 RTDDVDMDVRSREISSVSVEEVASTDVRRRTSEDAEALAOQGEAAADALATMTD 298
DB NSDESNNTNVAALINELGAAAOIARNAADASHHADNHOADEGQOVVEQITRAMNE 448
QY 299 IDEATDGTAGVEOLGEBRAADVESVTGYIDIAEQTNMLALNASEAARAGEGEPAYV 358
DB 449 LSEKISASCANIEALNSRTVINQILLEVYKGISQETNLLALNAIEAARAGEGEPAYV 508
QY 359 ADEVAAALBESREGSTRVEELVEQOAEETVEVDLDDEVNORIGGVERVEEAMETLOEI 418
DB 509 ADEVNLLHRAQESAOIQKMELELQAGAEVSTMTSQRYSLESEIANDAGERLSGV 568
QY 419 TDAVDAASGMOEVSATDEQASTEEVAEMVDVDRAGEIAALDDIADATDOQVRTV 478
DB 569 TSRIEISMSNOSVATTEBQA-----VDSILMDITEINTLNQGVENLQATLAC 621
QY 479 BEVERTVKL 488
DB 622 GELFTQAGRL 631

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RESULT 2

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US-09-252-991A-31086
; Sequence 31086, Application US/09252991A
; Patent No. 6551795
; ORGANISM: Pseudomonas aeruginosa
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 31086
; LENGTH: 545
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-31086

```

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Query Match 16.8%; Score 401.5; DB 2; Length 545;
Best Local Similarity 24.9%; Pred. No. 6,6e-24;
Matches 131; Conservative 111; Mismatches 205; Indels 79; Gaps 16;

QY 3 NNDNTLVTDVANGIDGHALADRIGIDEAELMRSLFTGIDDTMAALAAEQPLEFETAD 62
DB 47 SENELSVNA-LRNHMEGDMMD-----ALRADVLAAFPV-QPGGAAAE 88
QY 63 ALVTDFYDHLSEYERTQDLFANSTKTVEO----LKEIOAEVYLGIGRGEVTEYAAORA 117
DB 89 QVRQDLOEHSQWFR-----KYVEONOGILPNDATIHQALVEL-RPDLAVYIGAAS 137
QY 118 RIGK-IHDTLGGIPV--YLGAVTRYTGGLDALDDV-----VADRGE----- 159
DB 138 IVGKALLDVAARAEIPQVQAF-KELBERNEALLSLLEKHEQTRAREDSMRYSAMML 196
QY 160 -----AAAADVELVARFL-----PMLKLL-----TFDQOIAMDTYIDSYAQRLLD 199
DB 197 AGGIIVACVIGQLCRQLRAVLKPKRKIVASARVIAQGNLOEPGIVDS--DDEAGQLOR 254
QY 200 EIDSROELANAVATHEAPLSSLEATSQVARETDTMRARTDDQVDRMADVSRREISSVA 259
DB 255 ALGEMQENLRQMITTIIRQSEELHDTSGIGTSQISIVGASQADSATSMASMEEMIT 314
QY 260 SVEEVASTDVRRRTSEDAEALAOGEAAADALATMTDIDATDQVTVAGVQLGERAD 319
DB 315 NSQISDHDADNARVIAKSEELASSGGQVILNVBEMSHIADVNVOSSTISIALQOSSDE 374
QY 320 VESVTVGVIDIDIAEQTNMLALNASEAARAGEGEPAAVADVKALAEBSREGSTRVEEL 379

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DB 375 IHSIIQVIKIGIAEQTNLLALNAIEAARAGEGEPAAVVADEVNGLAARTOSTOETIAM 434
QY 380 VEQOAEETVEVDLDDEVNORIGGVERVEEAMETLOEITDAVDAASGMOEVSATDEQ 439
DB 435 IERFRASTGQAINMEGVSRIWEGVSPARQAGSINEIIDGTRHAAASVDEISQITREQ 494
QY 440 AVSTEEVAEMVDVDRAGEIAALDDIADATDOQVTVBEVERTV 485
DB 495 SRADDEIAQRVELLAQRSQQTQAMHEMA--AT--ARLNEVAATM 536

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RESULT 3

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US-09-252-991A-23255
; Sequence 23255, Application US/09252991A
; Patent No. 6551795
; ORGANISM: Pseudomonas aeruginosa
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 23255
; LENGTH: 663
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-23255

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```

Query Match 16.6%; Score 398; DB 2; Length 663;
Best Local Similarity 28.3%; Pred. No. 1.6e-23;
Matches 118; Conservative 74; Mismatches 171; Indels 54; Gaps 10;

QY 103 LGREYDTEYVAQPARIGKIHVVLG--GPDVYLG-----AY---TRYTGGLDALADD 151
DB 261 IGSFSEAEHLG-NTRILSPFVKGSLGDMVYIGISVDKDAVAMLTRKRSALVAALIA 319
QY 152 VVA-----DRG---BEAAAADVELVARFLPMLKLLTFDQOIAMDTYID 191
DB 320 VVAIVLLGLMLRVLMLQPLTDMGRAMODIAGEGDLTKR---LKVINSDEFGLAAFN 375
QY 192 SYAQRHDEISROELANAVATHEAPLSSLEATSQVARETDTMRARTDDQVDRMADV 251
DB 376 REVERIHESI--REVAGTA-----RQLHDAVQALVNVASNSMSMSDSQSNRTNSVA 424
QY 252 REISSVSVEEVASTDVRRRTSEDAEALAOGEAAADALATMTDIDEATDGTAGVE 311
DB 425 AALNELGAADIEARNADASHHADNHOADEGQOVVEQITRAMNELSEKISASCANIE 484
QY 312 QLGERAADVESVTGYIDIAEQTNMLALNASEAARAGEGEPAAVVADEVKALAEBSRE 371
DB 485 ALNSTVTVINQILEVYKGISQETNLLALNAIEAARAGEGEPAAVVADEVNLLHRAQE 544
QY 372 QSTRVEELVEQOAEETVEVDLDDEVNORIGGVERVEEAMETLOEITDAVEDAASQOE 431
DB 545 SAQOIQKMELELQAGAEVSTMTSQRYSLESEIANDAGERLSGVIAEIDGMNQ 604
QY 432 VSTATDEQAVSTEEVAEMVDVDRAGEIAALDDIADATDOQVTVBEVERTVKL 488
DB 605 VAITEBQA-----VDSILMDITEINTLNQGVENLQATLRACGELETOAGRL 654

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RESULT 4

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US-09-252-991A-32715
; Sequence 32715, Application US/09252991A
; Patent No. 6551795
; ORGANISM: Pseudomonas aeruginosa
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

```

```

; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 32715
; LENGTH: 906
; TYPE: PRF
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-32715

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Query Match      16.6%; Score 397.5; DB 2; Length 906;
Best Local Similarity 24.8%; Pred. No. 2,8e-23;
Matches 129; Conservative 87; Mismatches 158; Indels 147; Gaps 13;

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QY 79 QDLFANSTKVEOLK-----ETQAEYLGLGRGEYDTVEYAAQRAIKIHVYLGSPD 131
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 406 QDLFNNRMKPIISQIKTVADAVAVSVVDALHKYRAGVFDEERLQOELS----- 452
QY 132 VYLGATRYTGTGLDLADVDVADRGEAAAVDELVARFLPMLKLL----- 178
DB 453 ---GALSRIEKSNAVDSAD-----HRTAEKEETIESVPTLERVKMTLAYGEQARA 501
QY 179 -----TFDQOI-----AMDTYID---SYAORLHDEIDSKOE----- 206
DB 502 GSIRNVEAGTFNEMGAFPLPLGTALSTLIDLOSEBAKINQOMEKRYDMRTFFLIGA 561
QY 207 -----LANAVATHEAPLSLEATSQDVARTD-TMR--ARTDQV----- 244
DB 562 AALVLIYAAMFISLSIMRPLDLRGVIRRVQDSNLTLRADARGDEVSDTARAFNMML 621
QY 245 -----DEMADVSRKISSVSAS-----VEEVASTADVDR 272
DB 622 ESQOALLRHLEAKRLKLTTSDESAISNQSVSHVATSGQDQTMVATVHQMNAVQDVA 681
QY 273 RTSDEBALAQOGEAAADDLATWTIDIEATDQVT-----AGVEQLGRRADVESVTG 325
DB 682 RNQAQAAASASANSSEAHGTGTGLVHNLDAIQLISVWVGAGAVITLRLKTEIEISYLE 741
QY 326 VIDIIEQTMMLNLSIEARAGEAGEGFAVVADEVKALAEBSREOSTVEELVEQMOA 385
DB 742 VIGNIAQTMMLNLSIEARAGEAGEGFAVVADEVRSLATNTKATETIREMIEALQA 801
QY 386 ETEETVDQLEVNORIGEGVERVEBEAMETLOETIDAVEDAASQOEVSATDEQAVSTEE 445
DB 802 GASSAVSVMOOSREOQOVSVQRAHEAKKALGLIAQAVEGIAQSNVAOISTATEEQTATASE 861
QY 446 VAEVNDGVDDRAGEIA-----AALDDIADATQOVR 476
DB 862 VSONIDSLNLSIGVEAGAVKTSSTSSVELAKLANGELOQIQ 902

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RESULT 5
US-09-252-991A-16965
; Sequence 16965, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 16965

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; LENGTH: 696
; TYPE: PRF
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-16965

```

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Query Match      16.3%; Score 389.5; DB 2; Length 696;
Best Local Similarity 25.3%; Pred. No. 8,4e-23;
Matches 131; Conservative 98; Mismatches 210; Indels 79; Gaps 14;

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QY 1 MSNDNDTLVTVADVRNGIDGHALADRI--GLDSEAIAMRLSPFGICDDDTMAALAAQPLFE 58
    :: ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 213 LAGDENSVQAD-SRGRA-SLGRVLLKMGOMGNAMSSISKV-TAAEAVDRLINEIAELFE 269
QY 59 ATADALVYDFYHLSYVERTODLF-----ANSTKTVEOUKETOAEYL-----GLGRGEYD 109
DB 270 -----FVSGSVD--ELLETSPDLFOVREANNTFVSQTLIDKASQIADGFENLAGRSI 322
QY 110 TEYAAQRAIKIHVYLGAPVYLGAVTRYTG-----LIDALAD 150
DB 323 NLFH-----GYVLGALALASIIILGLVWVRETNRRLAETAEKDRNQAAILRLDEIAD 376
QY 151 DVVADRGEEAAAVDELVARFLPMLKLLTFDQIAMDYIDSYAQRILHDEIDSRQELA-- 208
DB 377 --LADGDLTVAAVTVE-----DFTGAIRADSINVSIDQLRELVET 413
QY 209 -NAVATHEAPLSLEATSQDVARTDTRARTDQVDMDVSRKISSVSASVEEVAST 267
DB 414 INQTAQVAAAQETOSTIMHLAE-----ASEHOAEIAGASAAINMAVSIQVSNAN 466
QY 268 ADDVRTSDEBALAQOGEAAADDLATWTIDIEATDQVTAGVGEQGERAAVSVTVGYI 327
DB 467 ASESSAVARSRVAIANKGEVHNITGMDNIREQIDTSKRIKRLGESSQEIQDVLISI 526
QY 328 DDIAEQTMMLNLSIEARAGEAGEGFAVVADEVKALAEBSREOSTVEELVEQMOAET 387
DB 527 NDIAQTMMLNLSIEARAGEAGEGFAVVADEVORLAEBSAATKQIEALVTKIQTDF 586
QY 388 EETVDQLEVNORIGEGVERVEBEAMETLOETIDAVEDAASQOEVSATDEQAVSTEEVA 447
DB 587 NEAVISIMETTSRVVARGARLADQAGVALLIEKVSITLALQINISNAARQOASSAGHIS 646
QY 448 EMVDGVDDRAGEIAALDDIADATDQOVRVEEVRETIV 485
DB 647 NTMNVIOETTSQTSAGTTATANSIGNLAKMASEMRNSV 684

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RESULT 6
US-09-902-540-15636
; Sequence 15636, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 15636
; LENGTH: 897
; TYPE: PRF
; ORGANISM: Myxococcus xanthus
US-09-902-540-15636

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Query Match      16.2%; Score 388.5; DB 2; Length 897;
Best Local Similarity 26.1%; Pred. No. 1,4e-22;
Matches 132; Conservative 107; Mismatches 202; Indels 65; Gaps 15;

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QY 2 SUNDNTLVTVADVRNGIDGHAL--ADRIQLD-----EAEIAMRLSF-TGIDDDTMAALAAEQ 54

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[illegible]

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RESULT 7
US-09-252-991A-32789
; Sequence 32789, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.116
; CURRENT FILING DATE: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 32789
; LENGTH: 710
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-32789

Query Match      16.1%; Score 385; DB 2; Length 710;
Beet Local Similarity 27.8%; Pred. No. 2e-22;
Matches 131; Conservative 83; Mismatches 215; Indels 42; Gaps 10;

QY      39 FTGIIDDTMAALAAQPLFEAT-----ADALVTDIFYDHLSEYERTODLPANS--- 85
DB      257 PERSKAEQAQAAPALDALRQAATTIRGQLPGSADALQAQNGSLQGRVNGIEGRAGVIR 316
QY      86 KKTVEQLKETQAEVLLGLGR-----GEYDTEYAAGRARIK-IHDVLGLGPDVYIK-AYT 138
DB      317 TQAQAQNGSSITQDMARAGRTLTEAGRGQLRESTASRDBASLWLIALALAFGCVAGWAIN 376
QY      139 RYTTGLLD-ALADDVADRGEEAANAADVELVAREFLPMILKLTTFDQQLMNTYIDSYQRL 197
DB      377 RIVRPLDEAL-----QAETIAGGLGRPPNPTLLGRBEL-----GOLQRV 420

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Qy      198 HDEI -DSQBELANNAVATHEAPLSLEATSCQVABERTDPMKARTDDQVDRMADYSSEIS 256
Db      421 MORMDSTJRELTVRIGDGV ---SOLASAEBSAVTEOTRGVNSQKXETQOVARAME 476
Qy      257 VSASVEEVASTADVDVRTSEDABEAALOOGEAABADALATMTDIDEATDGTAVGVEQLGR 316
Db      477 MAATVQDVARNNELASQAARQDEARQODAVIDQATPERLASBMDVSSEAMALTKRE 536
Qy      317 AADVSSYGVDDIDIAEOTNNMLNANSIEARAGEGEGEFAVVADEVKALAEBSREOSTVR 376
Db      537 SEQIESVDLVKISVAEQTNLLNALNAITEARRGDDGRGEFAVAADDEVKGLAQRTQSTAEI 596
Qy      377 BELVEQMOAETEETDOLDEVNQRIGEGEVEREAMETLQEITDAVEDAASGMEQVSTAT 436
Db      597 BELIGRLQOGAGEAERLENSRSLTASTVELARRGAALDISTRVSIDIONMNLQIATAA 656
Qy      437 DEQAVSTEEVAVMGVDVDRAGEIATAALDDIDATDQCVRYTAEVETYG 487
Db      657 EOGSTVAEINRSVLSVRVAEQSAAASQTAASQELARLGTQLDAOYGR 707

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      1  RESULT 8
      2  US-09-252-991A-30703
      3  / Sequence 30703, Application US/09252991A
      4  / Patent No. 6551795
      5  / GENERAL INFORMATION:
      6  / APPLICANT: Marc J. Rubenfield et al.
      7  / TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
      8  / TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
      9  / FILE REFERENCE: 107136.136
     10  / CURRENT APPLICATION NUMBER: US/09/252,991A
     11  / CURRENT FILING DATE: 1999-02-18
     12  / PRIOR APPLICATION NUMBER: US 60/074,788
     13  / PRIOR FILING DATE: 1998-02-18
     14  / PRIOR APPLICATION NUMBER: US 60/094,190
     15  / PRIOR FILING DATE: 1998-07-27
     16  / NUMBER OF SEQ ID NOS: 33142
     17  / SEQ ID NO 30703
     18  / LENGTH: 734
     19  / TYPE: PRT
     20  / ORGANISM: Pseudomonas aeruginosa
     21  US-09-252-991A-30703
     22
     23  Query Match          15.9%; Score 380.5; DB 2; Length 734;
     24  Best Local Similarity 24.7%; Pred. No. 4.7e-22;
     25  Matches 119; Conservative 91; Mismatches 178; Indels 93; Gaps 13;
     26
     27      41 GIDDDTMAALAEOPFEATADALVTDFYHLESY-----ERTQDLFANSTKIVE 90
     28      310 GNEVNLNKLTVDDOPLDYIDAE-----HGHIELFLPTTADSGVWTMLQIPQAAVFG 363
     29      91 QUKETQAEY-----LLGLGRGEYDTVEYAQRARIGKHIVLGLGPDVYLGAV-----T 138
     30      364 ELQQQLQSGELSDRGODILGM-----SLAGLVVALGL-LVWMLVGYGIARPL 409
     31      139 RYYTGLDALAD--DVADRGEEAAAVDEL--VARELPWLKLLTDPQIAMDPTIDSY 193
     32      410 RQLVGMDDIADGEBDLRRLLSSERA--DLGSLIAK-----GFTPLFGKL 452
     33      194 AORLHDEIDSRQELANAVATHEAPLSELEATSCDVAVERTTMAPRPDDVDVDRADVSRE 253
     34      453 QNMIGQVVSQVKS-----DSSEHTDIDAIRNTOGVOOOL---AE 490
     35      254 ISSVSAIVEVASTADVDYR-----TSEDAEALAQGEAAADALATMTDIDEATDGV 306
     36      491 IELVTAIVHEMTATQDVARNATHAEPANHADAHQKQIVSSSSAIGALASITGRA 550
     37      307 TAGVQLGERPADVESVTGVIDIAEQTNMLANASIEAPRAGEAGSGFAVADEVYALA 366
     38      551 VGVVONLAKDSNNIATLVAIRGLAEQNTNLLANALIEAARGAGSGRGFVADEVRYLA 610
     39      367 EBSRQSTRVEELVEQMAETEETVDDQDEVNQRIGEGVERVEEMETLQEIITDAVEDDA 426

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Db      611  ÖKTQATEEIQSMIQDQGTDRVVVKVMOQSERTDSDVHARQAEALRESTIQAVSVYN 670
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      427  SGHGEVSTATDEQAVTEEVAEMVDCVDDRAGEIAAALDDIADATDQVRTVEEVEVYG 486
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      671  DNMPOASAAEEGSAVAEDINRVANIGVAVNQVAGADBSAGASAEIRLAEQGRILVN 730
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      487  K 487
      :
Db      731  Q 731

RESULT 9
US-09-252-991A-23956
; Sequence 23956, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 23956
; LENGTH: 857
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-23956

Query Match      15.9%; Score 380.5; DB 2; Length 857;
Best Local Similarity 26.8%; Pred. No. 5.9e-22;
Matches 141; Conservative 92; Mismatches 226; Indels 67; Gaps 16;

Qy      2  SUNDTLVTADVNRGIDGHALADRIGLD-----EAEIAM--RLSFTGIDD-----DTM 47
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      352  ANSLDILQSSLAIEG--AYALKESGHDGEPILQQAQVAVNRVLVIGLDEARSRLREAR 409
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      48  AALAAEOP---LFEA-----TADALVTDFYHLBSYERTQDLFANSTKTYEQLK 93
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      410  AADAQEGPKSLREALELAEALREQATIDPDAYVSVKVLTNTIRGFADKLAE--YRASQLQ 467
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      94  ETQAEVILGLGRG---YTEVAQCARIGKIHDVIGLGPDVYLGAVTYTGTGLDALA 149
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      468  ERQVYAMGERRAGQVMARVRSWEAQOAM--LHS-LRTNSLIVGA-----AVLALLV 518
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      150  DDVAVADGEEAAAVDELVARFLPMLKLTFDQOIA---MDTYIDSYAQRLHDEIDSRQE 206
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      519  -----GLGNAFGISLIIYR--PLRQAMGVANHRIAGDLAVRDS---ERRDEVGQDMA 566
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      207  LANAVATVHAEPUSLE-----ATSQDVAERTDTNRARTDQVDRMADVSRREISSVA 259
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      567  AMRAMTSLRGIVISQLDDGVCRIGASEBALSGVTRRLGIDSGRAETEGVATAMQMAA 626
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      260  SVEEASTADDVRTSDEALAAQGEAAADDALATMTDIDEADGTAGTGEOLGERAAD 319
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      627  TYHEVANAEEAACAASADGKSVSGOEAVNRQTIERLERLAEAVRAATASVEALSADSQR 686
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      320  VESVTGVYDIAEOTNNMLANASIEARAGEGEGFVAVNDEVKALAESEHSTREVEEL 379
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      687  IGSVLDTYKSVABEQTNLALNAALTEAPARAGQGSGFPAVNDVEYALARRTQGSTAEITL 746
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      380  VEQMAETEETVDQLDEVNQRTIGEGVERVEEAMETLOETIDAVEDAASQMOVSTATDEQ 439
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      747  IGAQNGTQQAQVAVQWQSHQLVDSVDDALQTEAALGNIAFAVALLIQQMNQOIAASEQQ 806
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      440  AVSTEEVAEMVDCVDDRAGEIAAALDDIADATDQVRTVEEVEVRET 485
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      807  SAVAEENRSVTALREVADQSAQAMOSTASSSEQLAEIGRELQMV 852
```

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RESULT 10
US-09-252-991A-23288
; Sequence 23288, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 23288
; LENGTH: 701
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-23288

Query Match      15.8%; Score 379; DB 2; Length 701;
Best Local Similarity 29.0%; Pred. No. 5.9e-22;
Matches 96; Conservative 67; Mismatches 146; Indels 22; Gaps 4;

Qy      158  EEAAAVDELVARFLPMLKLTFDQOIAMPTYIDSYAQRLHDEIDSRQELANAVATVHA 217
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      384  QDIAGEGDLTKR----LAVTSRDEFGVIGDAFNQVERIHRSI---REAVAGTA----- 430
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      218  PLSLEATSQDVAERTDTNRARTDQVDRMADVSRREISSVASVEEVASTADDVVRTSED 277
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      431  --HKHDVSQLVYNASNSWANSDEOSNRTNSVAAAINELGAACOIRANPADASHHASD 488
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      278  AEALAAQGEAAADDALATMTDIDEADGTAGTGEOLGERAADVESYTGVDIAEQTNML 337
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      489  ANHQADGKQVVEQTRFANMELSEKISASCANTEALNSRTVNGQILEVYKGISQOTNL 548
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      338  ALNASTIEARAGEGEGFVAVNDEVKALAESEHSTREVEELVEQMAETEETVDQLDEV 397
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      549  ALNASTIEARAGEGEGFVAVNDEVKALAESEHSTREVEELVEQMAETEETVDQLDEV 608
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      398  NORIGEGVERVEEAMETLOETIDAVEDAASQMOVSTATDEQAVSTEEVAEMVDCVDDRA 457
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      609  QRYSLSVEIANNAGSLSVTRRIGELIDMNSVATATEEQTA-----VYDSINMDI 661
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy      458  GEIAAALDDIADATDQVRTVEEVEVRETGKL 488
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      662  TEINTLNQEGVENIQAATLRACGELFTQAGRL 692
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 11
US-09-328-352-5172
; Sequence 5172, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; PRIOR FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 5172
; LENGTH: 709
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-5172

Query Match      15.6%; Score 373.5; DB 2; Length 709;
Best Local Similarity 28.7%; Pred. No. 1.6e-21;
```

Matches 100; Conservative 67; Mismatches 141; Indels 41; Gaps 5;
QY 144 LIDALADVADRGSEAAAAVDELVARFLPMLKLTFFDQIMDPYIISYARLHDEIDS 203
DB 388 LIDELIAD--LADGDIRSYATVSE-----DFTGAIASINFPALDQ 424
QY 204 ROELANAVATHVEAPLSLEATSDVAERTDMRARTDQVDNRMAVDSREISVSASVEE 263
DB 425 LRDL-----VSRIHETSGEVARYTQDTQSTINGLAEASHQGEINAGSTANME 473
QY 264 VASTADVV-RTTSEDAEA-----LAQGEAAADALATMTDIDEATDGVTAQVEOLGER 316
DB 474 MAQSIDQVSANASSESAEVAQSRVQIASNGAVVNSIEGMDTRIQRIOETSKRIKRLGES 533
QY 317 AADVSVTCVIDIDIAEQTMALNLSIEBARAGEGEGFVAVADEKALAEBSRGSTRV 376
DB 534 SOEIGNIVSLINDIADQNTILALNIAIQSMAGEGRGFAVADEQRLAERSASATKOT 593
QY 377 EELVEOMQAEETFEYDQDDEVNQRIQGEVERVEEAMETLQETDVADEDAASQMOEVSTAT 436
DB 594 ETLVKTIOQDTHNAVISMEOQTTEVVRGANLAKDAGIALDEIQKXSGDIKLIASISDA 653
QY 437 DEQAVSTEEVAEMVDGVDNRAGEIAAALDIDATDQVTVVEEVRETV 485
DB 654 KLSASASHIATMTTVQETSTQTTATPTDARSVSELANMAESLRESV 702

RESULT 12

US-09-252-991A-31412
; Sequence 31412, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 31412
; LENGTH: 614
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-31412

Query Match 15.6%; Score 373; DB 2; Length 614;
Best Local Similarity 26.6%; Pred. No. 1.5e-21;
Matches 142; Conservative 87; Mismatches 214; Indels 90; Gaps 18;
QY 9 VTADVANGIDGHALADRIQ-----LDSEAIAMRLSFTG-IDDDYMAALAEQPLFEA 59
DB 108 LUGDVR-----AYRELLGGPVRAAQLIDEA-----NLQPRGQVEKKNVLLGRQ----- 152
QY 60 TADALVTDDYDHESTER-TODIFANSTYTVBOLKETQAEVYLLGGRGEY--DTREYAAQ 115
DB 153 -AEA-QTKWMSQFEAEQRAVODILGRIGSVABEGLDRVERL---REHRRRLGTAVRQG 206
QY 116 RARIGIHVILGIGPVYIG-----ATRYVYGLDLALADV-----VAQR- 156
DB 207 RQRF-----LEAGAPPIAGDQAVTGIDATTAQOMALRDELHQASDLHSSISAEARAT 260
QY 157 -----GEEAAAIVDE--LVARFL--PMLKLTFFDQIMDPYIISYARLHDEIDS 203
DB 261 MLGSLVILGASLAVALLSLIMLVNRVLVRPVQRILIHINQISGDBGRIETIRKDELK 320
QY 204 ROELANAVATHVEAPLSLEATSDVAERTDT-----MRARTDQVNRMAVDSREISVS 256
DB 321 LALAAATLDFVDFIDRRLRRSTRDSDASGSLNATASIMAAAGTREQFSRTQOVATVMOE 380

QY 257 VSASVEEASTADVDVRTSEDAEALAOGEAAADALATMTDIDEATDGVTAQVEOLGER 316
DB 381 MSATAGEVARAYAGAAABADSDAQGEDVMEETIRISIGEMKEIDHTEVREIQESD 440
QY 317 AADVSVTCVIDIDIAEQTMALNLSIEBARAGEGEGFVAVADEKALAEBSRGSTRV 376
DB 441 SGRIGKVLDIRGIAEQNTILALNIAIEAARGAGGFAVADEVRTLQRTESIAET 500
QY 377 EELVEOMQAEETFEYDQDDEVNQRIQGEVERVEEAMETLQETDVADEDAASQMOEVSTAT 436
DB 501 HQIIDTVNGAVNABARAEISQSGSEAGAEQVANAAGMLRQITASVSIIRMNQIATVA 560
QY 437 DEQAVSTEEVAEMVDGVDNRAGEIAAALDIDATDQVTVVEEVRETVKLS 489
DB 561 EQQVAVADISRNLT-----EIAS-----IASSNOEQVEQTEAASRLHGLS 602

RESULT 13

US-09-252-991A-18744
; Sequence 18744, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 18744
; LENGTH: 573
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-18744

Query Match 15.4%; Score 368.5; DB 2; Length 573;
Best Local Similarity 25.0%; Pred. No. 3.1e-21;
Matches 129; Conservative 89; Mismatches 175; Indels 123; Gaps 15;
QY 14 RRGIDGHALADRI-GL--DEAEIAMRLSFTGIDDDYMAALAEQPLFEATD-ALVTDFY 69
DB 100 RSLLEGHLSAQIGLGRDHENIQAL-----DRVQYVAMQ--GEAEELAVARF- 149
QY 70 DHLESYERTQDLFANSTYTVBOLKETQAEVYLLGGRGEYDTREYAAQRAKIGIHVILGLG 129
DB 150 -----ERGVALMSATSARVLSLAASDPSAAQLSYGSDRQFGAMREVINQL----- 196
QY 130 PDVYIGATRYRYTGLDLADADVADRGEEAAAIVDELVARFL-----PMLKLTFFDQ 183
DB 197 -----DEMEEAALADGEGASSALGERHRMQOVALVAFGL 231
QY 184 IAMDY-----IDSYAQLHD-----EIDSRQF-----LANAVATHV 215
DB 232 VGLSLVLPFGLVTRPRLRLRLLEIANGGDRLRVRLVETVSROEPLGSAFNAFLDKL 291
QY 216 EAPLSLEATSDVAERTDMRARTDQVDNRMAVDSREISVSASVEEVAUST 267
DB 292 QPLIREVGRVTGEVADSAGSLAGMTAAN-DRLINSEHASVDQVSTAATQMSAVHEVARN 350
QY 268 ADVVARTSEDAEALAOGEAAADALATMTDIDEATDGVTAQVEOLGERADVSVTVGI 327
DB 351 AQSAAQVADDAARRQREBANVVEATIEVIRQLADGVESSSSIQQLAETASIDAVLTVI 410
QY 328 DIAEQTMALNLSIEBARAGEGEGFVAVADEKALAEBSRGSTRVEELVEOMQAE 387
DB 411 KGIACQNTILALNIAIEAARGAGGFAVADEVRALAAARTQSTKQIQARIBERLQGV 470
QY 388 EETVDQDDEVNQRIQGEVERVEEAMETLQETDVADEDAASQMOEVSTATDEQAVSTEEVA 447

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: November 23, 2005, 04:50:03 ; Search time 159.851 Seconds
(without alignments)
1278.178 Million cell updates/sec

Title: US-09-455-978b-2

Perfect score: 2394
Sequence: 1 MSNDTLVTADVNRNGIDGH.....ATDQVRYVEVETVWKLK 489

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_AA_Main:*

- 1: /cgn2_6/prodata/1/pubppaa/US07_PUBCOMB.pep:*
- 2: /cgn2_6/prodata/1/pubppaa/US08_PUBCOMB.pep:*
- 3: /cgn2_6/prodata/1/pubppaa/US09_PUBCOMB.pep:*
- 4: /cgn2_6/prodata/1/pubppaa/US10_PUBCOMB.pep:*
- 5: /cgn2_6/prodata/1/pubppaa/US10_PUBCOMB.pep:*
- 6: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	399.5	16.7	535	US-10-282-122A-66393	Sequence 66393, A
2	399.5	16.7	535	US-10-389-647-531	Sequence 531, App
3	386.5	16.1	682	US-10-282-122A-66174	Sequence 66174, A
4	374.5	15.6	680	US-10-282-122A-69670	Sequence 69670, A
5	371.5	15.5	686	US-10-282-122A-68162	Sequence 68162, A
6	361	15.1	644	US-10-282-122A-77591	Sequence 77591, A
7	359.5	15.0	891	US-09-272-809-5	Sequence 5, Appl
8	356.5	14.9	539	US-10-282-122A-51025	Sequence 51025, A
9	348.5	14.6	679	US-10-389-647-372	Sequence 372, App
10	348	14.5	626	US-10-282-122A-52305	Sequence 77066, A
11	338	14.1	686	US-10-282-122A-52305	Sequence 52305, A
12	332	13.9	547	US-10-332-288-28	Sequence 28, Appl
13	326	13.6	641	US-10-282-122A-77278	Sequence 77278, A
14	315	13.2	643	US-10-282-122A-77602	Sequence 77602, A
15	314.5	13.1	501	US-10-282-122A-69564	Sequence 69564, A
16	313.5	13.1	541	US-10-282-122A-77047	Sequence 77047, A
17	308	12.9	845	US-10-282-122A-76517	Sequence 76517, A
18	297.5	12.4	1137	US-10-450-763-54582	Sequence 54582, A
19	292.5	12.2	531	US-08-976-063C-34	Sequence 34, Appl
20	292.5	12.2	531	US-09-750-986D-34	Sequence 34, Appl
21	292	12.2	564	US-10-335-977-6156	Sequence 6156, App
22	289	12.1	564	US-10-335-977-6157	Sequence 6157, App
23	289	12.1	565	US-09-882-227-462	Sequence 462, App
24	284	11.9	630	US-09-882-227-460	Sequence 460, App
25	280	11.7	293	US-10-335-977-4944	Sequence 4944, App
26	276	11.5	293	US-10-335-977-4942	Sequence 4942, App
27	273.5	11.4	664	US-10-335-977-4943	Sequence 4943, App

ALIGNMENTS

28	269	11.2	723	5	US-10-994-726-246	Sequence 246, App
29	269	11.2	753	4	US-10-282-122A-47230	Sequence 47230, A
30	269	11.2	753	5	US-10-994-726-245	Sequence 245, App
31	266	11.1	606	5	US-10-994-726-50	Sequence 50, Appl
32	266	11.1	633	5	US-10-994-726-49	Sequence 49, Appl
33	263	11.0	431	4	US-10-389-647-451	Sequence 451, App
34	257	10.7	431	4	US-10-012-819-228	Sequence 228, App
35	254	10.6	433	2	US-08-945-038-6	Sequence 6, Appl
36	252.5	10.5	433	4	US-10-335-977-8500	Sequence 8500, App
37	252.5	10.5	438	4	US-10-335-977-8501	Sequence 8501, App
38	249.5	10.4	701	5	US-10-450-763-55498	Sequence 55498, A
39	245	10.2	883	4	US-10-369-493-18563	Sequence 18563, A
40	242.5	10.1	191	5	US-10-450-763-48577	Sequence 48577, A
41	241	10.1	654	4	US-10-282-122A-76558	Sequence 76558, A
42	241	10.1	673	4	US-10-335-977-6249	Sequence 6249, App
43	239.5	10.0	2310	3	US-09-874-923-120	Sequence 120, App
44	239.5	10.0	2310	3	US-09-991-496-120	Sequence 120, App
45	239.5	10.0	2310	3	US-09-820-843A-114	Sequence 114, App

RESULT 1

US-10-282-122A-66393

Sequence 66393, Application US/10282122A

Publication NO. US20040029129A1

GENERAL INFORMATION:

APPLICANT: Wang, Lianggu

APPLICANT: Mamdo, Carlos

APPLICANT: Malone, Cheryl

APPLICANT: Haselbeck, Robert

APPLICANT: Ohlsen, Karl

APPLICANT: Zyskind, Judith

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John

APPLICANT: Carr, Grant

APPLICANT: Yamamoto, Robert

APPLICANT: Foreyth, R.

APPLICANT: Xu, H.

TITLE OF INVENTION: Identification of Essential Genes in Microorganisms

FILE REFERENCE: ELITRA 034A

CURRENT APPLICATION NUMBER: US/10/282,122A

CURRENT FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/230,335

PRIOR FILING DATE: 2000-09-06

PRIOR APPLICATION NUMBER: 60/230,347

PRIOR FILING DATE: 2000-09-09

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR FILING DATE: 2000-10-23

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-11-27

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/267,636

PRIOR FILING DATE: 2001-02-09

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR FILING DATE: 2001-02-16

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 78614

SOFTWARE: PatentIn version 3.1

SEQ ID NO 66393

LENGTH: 535

TYPE: PRT

ORGANISM: Pseudomonas aeruginosa

US-10-282-122A-66393

Query Match 16.7%; Score 399.5; DB 4; Length 535;
Best Local Similarity 25.2%; Pred. No. 1.6e-15;
Matches 132; Conservative 111; Mismatches 206; Indels 75; Gaps 16;

3 NDNDTLVADVANGIDGHALADRLIGLDEAETAMRLSFTGIDDDTTMAALAEOPLEATAD 62
37 SENELSVNA-LRNHMEGDMHD-----ALRADVLAFAFV-QPGGAAB 78

63 ALVDPFYLHSEYERTODLFANSTKTVEQ-----LKEQAELVLLGEGEDTEYAORA 117
79 QVRDQLQESHGQWFR-----KVEONOGPLINDAIHQALVEL-RPDLFAVIGAAS 127

118 RIGK-IHNVGLGSPV--YLGAATRYTGLDALADV-----VADRGEE----- 159
128 IVGKALDPVAAARELPQVQAF-KELGRNEALSLEIKVEQTNRAEDSMRYSAMML 186

160 -----AAAAYDELVARFL-----PMLKLTFPDQOIAMDTY-----IDS--YAORLHDEI 201
187 AGGILVACLVIGQLCRQLRAVLQPLRLKLVSSARVIAQGNLQEPICVDNDBAQLORAL 246

202 DSRQELANAVATHTAPLSSLEATSDVAERTDTMRATDDQVDMADVSRISVSASV 261
247 GEMQENLRQMTITIRQSEBELHDTQSIGQTSIVHGASQOADSATSMAASMEEMITNI 306

262 EEVASTADDVVRTSEDAEALAQCGEAAADALATMTDIDEATDGTAGVBOLEGERADVE 321
307 SQISDHADNARVISAKESEELASSGQOVILNVEGMSRIADVNGSSTITALGQSSDEIH 366

367 SIQVTKIGIAEQTNLALNAAIEAARAGAGRGFAVVADEVGLAARTTOSTQOETIAMIE 426

382 QMQAETEEVDQLDEVNQRIEGEYERVEAMETLOEITDAVEDAASQGEVSTATDEQAV 441
427 RIRASTGAINSMAGSVRVNEGVSFARQAGVSIINEILDGTRHAAVYDEISQTIREQSR 486

442 STEEVAEMVDGVDPRAGEIAAALDDIADATDQOVRTVEEVRTV 485
487 ASDEIAQRVELLIAQRSQONTQAMHEMA-AT---ARRINEVAATM 526

Db

RESULT 2
US-10-389-647-531
; Sequence 531, Application US/10389647
; Publication No. US20040033549A1
; GENERAL INFORMATION:
; APPLICANT: GREENBERG, E. Peter
; APPLICANT: SCHUSTER, Martin
; APPLICANT: LOSTROH, Candl
; TITLE OF INVENTION: QUORUM SENSING SIGNALING IN BACTERIA
; FILE REFERENCE: UTZ-038CP
; CURRENT APPLICATION NUMBER: US/10/389,647
; CURRENT FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: 09/653730
; PRIOR FILING DATE: 2000-09-01
; PRIOR APPLICATION NUMBER: 60/153022
; PRIOR FILING DATE: 1999-09-03
; NUMBER OF SEQ ID NOS: 710
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 531
; LENGTH: 535
; TYPE: PRT
; ORGANISM: *Pseudomonas aeruginosa*
US-10-389-647-531

Query Match 16.7%; Score 399.5; DB 4; Length 535;
Best Local Similarity 25.2%; Pred. No. 1.6e-15;
Matches 132; Conservative 111; Mismatches 206; Indels 75; Gaps 16;

3 NDNDTLVADVANGIDGHALADRLIGLDEAETAMRLSFTGIDDDTTMAALAEOPLEATAD 62
37 SENELSVNA-LRNHMEGDMHD-----ALRADVLAFAFV-QPGGAAB 78

63 ALVDPFYLHSEYERTODLFANSTKTVEQ-----LKEQAELVLLGEGEDTEYAORA 117
79 QVRDQLQESHGQWFR-----KVEONOGPLINDAIHQALVEL-RPDLFAVIGAAS 127

118 RIGK-IHNVGLGSPV--YLGAATRYTGLDALADV-----VADRGEE----- 159
128 IVGKALDPVAAARELPQVQAF-KELGRNEALSLEIKVEQTNRAEDSMRYSAMML 186

160 -----AAAAYDELVARFL-----PMLKLTFPDQOIAMDTY-----IDS--YAORLHDEI 201
187 AGGILVACLVIGQLCRQLRAVLQPLRLKLVSSARVIAQGNLQEPICVDNDBAQLORAL 246

202 DSRQELANAVATHTAPLSSLEATSDVAERTDTMRATDDQVDMADVSRISVSASV 261
247 GEMQENLRQMTITIRQSEBELHDTQSIGQTSIVHGASQOADSATSMAASMEEMITNI 306

262 EEVASTADDVVRTSEDAEALAQCGEAAADALATMTDIDEATDGTAGVBOLEGERADVE 321
307 SQISDHADNARVISAKESEELASSGQOVILNVEGMSRIADVNGSSTITALGQSSDEIH 366

367 SIQVTKIGIAEQTNLALNAAIEAARAGAGRGFAVVADEVGLAARTTOSTQOETIAMIE 426

382 QMQAETEEVDQLDEVNQRIEGEYERVEAMETLOEITDAVEDAASQGEVSTATDEQAV 441
427 RIRASTGAINSMAGSVRVNEGVSFARQAGVSIINEILDGTRHAAVYDEISQTIREQSR 486

442 STEEVAEMVDGVDPRAGEIAAALDDIADATDQOVRTVEEVRTV 485
487 ASDEIAQRVELLIAQRSQONTQAMHEMA-AT---ARRINEVAATM 526

Db

RESULT 3
US-10-282-122A-66174
; Sequence 66174, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haeselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zykend, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trewick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Foreyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA 034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308

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; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: Patent version 3.1
; SEQ ID NO 66174
; LENGTH: 682
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-10-282-122A-66174

Query Match          16.1%; Score 386.5; DB 4; Length 682;
Best Local Similarity 27.5%; Pred. No. 1.2e-14;
Matches 95; Conservative 77; Mismatches 140; Indels 33; Gaps 4;

QY 144 LLDALADVVAVRGEBAAAVDELVARFLPMLKILTFDQOIAMDTYDSYAOGLHDEIDS 203
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 356 LLDDELID--LADODDLVVAATVTE-----DPTGAIADSIINVSIDQ 392

QY 204 ROELA--NAVATVHAPLSSLEATSDQVAERTDTMRARTDDQVDMADVSRISVSAS 260
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 393 LELVETINQTVAVQVAAAQETOSTAMHLAE-----ASEHQOEIAGASAAINEMAVS 445

QY 261 VERVASTADVDRTSDAEALAAQGEAAADALATMTDIDEATDGTAGVGEOLGERAADV 320
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 446 IDQVSAASBSSAVERSAIANKNEVNHNTTGMNIREQIQDTSKRIRKLGESSQEI 505

QY 321 ESATGYIDIAEQTNMLANASIEARAGEGFAVVADEVKALAEESRHOSTRVELY 380
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 506 GDIYSLINDIADDTNIALNALQASMGADGAGFVVADEVORLERSAAKQIEALV 565

QY 381 EQMAETEETVDQLEVNORIGGVERVEBAMETLOEITDAVEDAASGQEVSTATDEQA 440
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 566 KTIQDTNEAVISMEOGTSSEVVGARLAQDAGVALSEIEKYSKTLAALQINISAAEQQA 625

QY 441 VSTEVEAEMVDGVDDRAGETAALDDIADATDQVATVEERETV 485
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 626 SSAGHISNTMNVIQEIITSQTSAGTTATARSIGNLAKKASERNVS 670

RESULT 4
US-10-282-122A-69670
; Sequence 69670; Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282.122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
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; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: Patent version 3.1
; SEQ ID NO 69670
; LENGTH: 680
; TYPE: PRT
; ORGANISM: Pseudomonas syringae
US-10-282-122A-69670

Query Match          15.6%; Score 374.5; DB 4; Length 680;
Best Local Similarity 24.2%; Pred. No. 6.1e-14;
Matches 120; Conservative 103; Mismatches 201; Indels 71; Gaps 12;

QY 23 ADRIGDEAEIA-----WLSFTGIDD-DTMAALAAEQPLFE--ATADALVDF 68
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 207 ADAFGRDASQFGRVLNGMLEGNATLRTQVEDRDARARLAEIAELFEFVSGSDEILETS 266

QY 69 YHLESYERTQDLFANSTTVEQLKETQAEYLLGLGRGYDTEYMAQRARIGKIHD-VIG 127
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 267 PELVQVRESGNIF-NTSQTLDETSVLANSL-----ENLAKRRRTMTVGGYVIG 315

QY 128 LQPDVYLGATRYTYGTLALADADVADRGEEAAAVDELVARFLPMLKILTFDQOIA-- 185
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 316 L-----LALMSIILGLV-----WRETNRQRLRETRQKSENRQTRIMLLDEIENLADG 364

QY 186 -----MDTYIDSYAOGLHDEIDSROELA--NAVATVHAPLSSLEATSDQVAERTD 234
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 365 DLVTASVTEDEFGALADSIINVSIDQLRELVVNTINTABQVSAVETQATMAQLS----- 420

QY 235 TMRARTDDQVDMADVSRISVSASVEEVAATADVVRTSEPAELAAQGEAAADALDA 294
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 421 ---ASEHQALQISAASTAVNDMAASIDQVSAVASBSSAVERSAIANKNEVONTIH 477

QY 295 TMTDIDEATDQVAGVAGGERADAVESVTGVIDIAEQTNMLANASIEARAGEGEG 354
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 478 GMDNIREQIQDTSKRIRKLGESSQEIIGDIYSLDDIADDTNIALNALQASMGADGAGRG 537

QY 355 FAVVADEVKALAEESRHOSTRVELVEQMAETEETVDQLEVNORIGGVERVEBAMET 414
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 538 FAVVADEVORLERSAAKQIETLVRAIQNDTNEAVISMEOGTSSEVVGARLAQDAGVA 597

QY 415 LOEITDAVEDAASGQEVSTATDEQAVSTEVEAEMVDGVDDRAGETAALDDIADATDQ 474
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 598 LGEIEGVSRVLAELISITDAHQQAES-----AGQISQTMVTVIQDTSQOT 643

QY 475 VRTVEEVRTEVGLKS 489
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 644 TSGTSATASISGMLA 658

RESULT 5
US-10-282-122A-68162
; Sequence 68162; Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
```

```
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282.122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 68162
LENGTH: 686
TYPE: PRT
ORGANISM: Pseudomonas putida
US-10-282-122A-68162
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Query Match      15.5% Score 371.5; DB 4; Length 686;
Best Local Similarity 24.7%; Pred. No. 9, 2e-14;
Matches 119; Conservative 91; Mismatches 196; Indels 75; Gaps 11;

QY 37 LSTFGIDD-DTMAALAEQPLFEATRDALVTPTFYHLSYEKTOLF--ANSTKVEQK 93
DB 237 IQVTVEVDADARARLAELAEFQVAGSYD-----ELLETSPELFRVREAGNIFSL 289
QY 94 ETQAEYLGLGEGVEDTEVAAQARIGKIHVIGLGPVYLGAATRYVTGLDALADVV 153
DB 290 QTLDEASHLNG-----FENLAGKRTLDVQ-----GYVGLL-ALASITL 330
QY 154 -----ADRGEEAAAADVELVARFLPMLKLTFFDOQIA-----MD 187
DB 331 IGLVMVTRTNRLRETAERKERNQAI-----KLLDEIBELADGDLTVTSVTE 380
QY 188 TTIIDSYAQRHLDEISROELA---NAVATVNEAPLSSLEATQSDVAERTDTMRARTDOV 244
DB 381 DTTGAIADISINYSVQRLDVLATIRHSAYQVAAVODTONTKROLAKSEHQAAQISEKS 440
QY 245 DDMADVREISSVSASVEEVASTADDVRKTSDEALAOQGEAAADALATWTIDIDEATD 304
DB 441 EAVGVMEISIDRVSAHAAYSAKVA-----ERSVALANKGNEVHNTINGMDNIREQ 493
QY 305 GVTAGVEQDGERADVESVTGVIDIAEQTNMLANASIEAARAGEGAEVAVADEVKA 364
DB 494 DTAKRIKRLGESSQEFIDVSLIDIDADQTNILALNAIAQASLAGAGRGAVVADVQR 553
QY 365 LAEBEREGSTRVEELVEQQAETEETVDDLVNQRIGSEVERVEAMETTLOEITDAVBD 424
DB 554 LAERSSSARQIEALVRTIQADTNEAVISMEOGTTAEVVGARLDAGVAALEIGVSN 613
QY 425 AASGQEVSTATDEQAVSTEVEVAEMVDGVDRAGEIAALDDIADATDOQVTFVEEVRT 484
DB 614 LADLIHSIDAAQLOTTSSAGQISHMAVYIQITTAQTSAGSGATADSIRILAMASEMRKS 673
QY 485 V 485
DB 674 V 674
```

```
RESULT 6
US-10-282-122A-77591
Sequence 77591, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyekind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Foreych, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282.122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 77591
LENGTH: 644
TYPE: PRT
ORGANISM: Vibrio cholerae
US-10-282-122A-77591

Query Match      15.1% Score 361; DB 4; Length 644;
Best Local Similarity 22.7%; Pred. No. 3, 5e-13;
Matches 120; Conservative 98; Mismatches 212; Indels 98; Gaps 14;

QY 28 LDEAELARLSFTGDDDTMAAL---AAEQPLF----- 57
DB 139 LNQQODGFFPFGISGKRTVMSEFOEANGVEKMFANQYLVNGNTSMGSKSMDMVRLLN 198
QY 58 -----EATADALVTDFYHLSYEKTODLFANSTKVEQKETOAEYLIG-LGRGEYDTEY 112
DB 199 SFKIEDTQFVFLTNAGSEVQIHRQKEGV---KSLQGIYSGASALLNKSGFNLISTDY 254
QY 113 AAQRARIGKIHVIGLGPVYLGAATRYVTGL---DALAD-DVYADR---GEEAAAAD 165
DB 255 QGEEVMTVASI-----YIESMDVFLVGTVPVNEVFABLDVVAQRMMLTTLAAVAIF 304
QY 166 ELVAFELPMLKLTFFDOQIAMDITYIDSYAQRHLH-----ELDSROELA----- 208
DB 305 IFMGIFLA-----NSIAMP--INOIAKFTPLDGRGDGLSORIEYKXGDEILQJLSKG 354
QY 209 -NAVATVNEAPLSSLEATSD-----VAERTDTMRARTDOVDVDMADVREISSVSAS 260
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Db 355 FNGFIEKIHQSIDVAQTSRELOVAAEGYSRKALVTHDNSQOQRDQTIQVTTAINQMGAT 414

Qy 261 VEEVASTADVDVRTSDDAALAQOGBAABDLAMTMDIDATQGVATGAYGOLGERADV 320

Db 415 ISFISAAKATMAETNAQASGNADQGRNVYKAKKAIISLHADIENTGKYVEQLSTQOEI 474

Qy 321 ESVTVGIYDIAETNMNLALNASIEARAGEGEGFAYVADDEVKALAEBSRQSTRVELV 380

Db 475 GSTILDIRGISEQTMLALNTAAIEARAGDQGRFAYVADEKRLNASKRTASSTEIQMT 534

Qy 381 EOKQAETBEVDQLDEVNORIGEGYERVEAMETQOETIDAVEBDAASGMCQSTADEQA 440

Db 535 NQIQNDAKNAVASAMDAGKTVTHQGVAADEAVQLVMSISDRIHDSIDRNTQVATATEQS 594

Qy 441 VSTEEVEAMVDGVDDPAGIEAAALDDIDATQOQRYTBEVREYVYGL 488

Db 595 TVVHTTNQNTBEETINALEVYTTASBEAAS-----KSLREISGRLL 635

RESULT 7

```

US-09-272-809-5
; Sequence 5, Application US/09272809
; Patent No. US2002002239A1
; GENERAL INFORMATION:
; APPLICANT: Lagarias, John C.
; TITLE OF INVENTION: Phytofluors as fluorescent labels
; FILE REFERENCE: 2500.118US0
; CURRENT APPLICATION NUMBER: US/09/272,809
; CURRENT FILING DATE: 1998-03-19
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 891
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism:cphs locus SLU041
; OTHER INFORMATION: (locus 1001300) an 891 aa protein,
; OTHER INFORMATION: methyl-accepting chemotaxis protein I. Homology
; OTHER INFORMATION: to tsr in laet 250 aa.
US-09-272-809-5

```

```

Query Match      15 0%; Score 359.5; DB 3; Length 891;
Best Local Similarity 27.1%; Pred. No. 6.3e-13;
Matches 136; Conservative 86; Mismatches 197; Indels 83; Gaps 19;

QY      23  ADRIGLDAEAEIAMRLSPFGIDDQTMALAAEOP--LFEATADALVTDFYDHESEY-----75
DB      418  ADPV-----LVYRPDATTAGTIVIAESVAEGYPKALGATLADPPCADSY--VEKTRSGRI 469
QY      76  ERTODLIPANSTKT---VEQLK--ETQAEYLLGLGGEYDTEYAAQARIRIGKIHDTLGL- 128
DB      470  QATRIPIY-NAGLTIPGHQIKRFEVKANLV-----AATINKGNLGLGLI 512
QY      129  -----GP-----DVLIGAYTRRYTGL---DALADDVADVADRGEEAAAADVELARFLP 173
DB      513  AHQSGPRDMQHONEIDLFGQLTVGVGLALERSDLLAQOKIAE--VEQRQMEKQKRALRLE 570
QY      174  MLKLLTPQOQIAMDTYISYAQRHLDELIDSKRELANNAVATHEALSSLEATSQVAERT 233
DB      571  L--LMEVPPVSRGDLTIRAHV--TEDEIGTADSYNATIESARRIVTVQVTAASQFTTT 626
QY      234  DT-----MRAKTDQVDMADVAREISSVASVEEYASTADVDRRTSEDAEALAOGE 286
DB      627  DTNEVAVVRQIAQOANRQALDVAEALERLCANMKKSIQAAENNAQAQESAVQRATVQDQGE 686
QY      287  AAADDALATMTDIDAEATGVTAGVEQLGERADVSVTVGVIDIAEQTNMLALNLSIEA 346
DB      687  DAMNRTVDCIVAIRFVAVATAKQVRISSSQIKIKVNNLISPADQNTLLANNAITEA 746
QY      347  RAGEAGEGFVAVADEVKALAEESRQSTVEELVEQMAQETETVVDQLDENVQRIIGEEVE 406

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Db	747	HAGEGRGFVAVADVRLRARSAAATVETIQLVATICQETNEVNVAMAGEGVAVGTR	806
Qy	407	RVEEMETLQETIATVAVDAAGMOE-VATADDEQAVSTEE-----VEAMT-----	451
Db	807	LVEETRRRLNQIT-AVSAQISGLVETALISAAEQSGTSVYQTMALVQIADKNSSEAS	865
Qy	452	GVDDRAGETIAALDDIADATDQ 473	
Db	866	GVSATFKELLVAVQSLQENVKQ 887	

RESULT 8

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US-10-282-122A-51025
? Sequence 51025, Application US/10282122A
? Publication No. US20040029129A1
? GENERAL INFORMATION:
? APPLICANT: Wang, Liangsu
? APPLICANT: Zamudio, Carlos
? APPLICANT: Malone, Cheryl
? APPLICANT: Haselbeck, Robert
? APPLICANT: Ohlsen, Kari
? APPLICANT: Zykkind, Judith
? APPLICANT: Wall, Daniel
? APPLICANT: Trawick, John
? APPLICANT: Carr, Grant
? APPLICANT: Yamamoto, Robert
? APPLICANT: Forsyth, R.
? APPLICANT: Xu, H.
? TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
? FILE REFERENCE: ELITRA.034A
? CURRENT APPLICATION NUMBER: US/10/282,122A
? PRIOR FILING DATE: 2003-02-20
? PRIOR APPLICATION NUMBER: 60/191,078
? PRIOR FILING DATE: 2000-03-21
? PRIOR APPLICATION NUMBER: 60/206,848
? PRIOR FILING DATE: 2000-05-23
? PRIOR APPLICATION NUMBER: 60/207,727
? PRIOR FILING DATE: 2000-05-26
? PRIOR APPLICATION NUMBER: 60/220,335
? PRIOR FILING DATE: 2000-09-06
? PRIOR APPLICATION NUMBER: 60/230,347
? PRIOR FILING DATE: 2000-09-09
? PRIOR APPLICATION NUMBER: 60/242,578
? PRIOR FILING DATE: 2000-10-23
? PRIOR APPLICATION NUMBER: 60/253,625
? PRIOR FILING DATE: 2000-11-27
? PRIOR APPLICATION NUMBER: 60/257,931
? PRIOR FILING DATE: 2000-12-22
? PRIOR APPLICATION NUMBER: 60/267,636
? PRIOR FILING DATE: 2001-02-09
? PRIOR APPLICATION NUMBER: 60/269,308
? PRIOR FILING DATE: 2001-02-16
? Remaining Prior Application data removed - See File Wrapper or PALM.
? NUMBER OF SEQ ID NOS: 78614
? SOFTWARE: PatentIn version 3.1
? SEQ ID NO 51025
? LENGTH: 539
? TYPE: PRT
? ORGANISM: Bordetella pertussis
US-10-282-122A-51025

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Query Match	14.9%	Score 356.5	DB 4	Length 539
Best Local Similarity	26.6%	Pred. No. 5.3e-13		
Matches	126	Conservative 81	Mismatches 153	Indels 113
			Gaps 15	
QY	38	SFTGIDDDMAL-----AAQGLFEATDALVTDFYDHLESYERTODLFANSTKYVEQL	92	
		: :	: :	
Db	126	SFPAISIDEMMALERDDAAYLQKVKAGQASAAFAARLGEESTYLDKLSSETLAHET	188	
QY	93	KETQAEYLLGLGRGEYDEYAQRARIKGIHVLGLGPRDYLGAYTRYTGLLDALADV	155	
		: :	: :	
Db	186	RETIMLYV-----YAA-----LLLLIVGIASLYLMTRAVVRPLGR--	222	

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RESULT 9
US-10-389-647-372
; Sequence 372, Application US/10389647
; Publication No. US20040033549A1
; GENERAL INFORMATION:
; APPLICANT: GREENBERG, E. Peter
; APPLICANT: SCHUSTER, Martin
; APPLICANT: LOSTROH, Candi
; TITLE OF INVENTION: QUORUM SENSING SIGNALING IN BACTERIA
; FILE REFERENCE: UIZ-038CP
; CURRENT APPLICATION NUMBER: US/10/389,647
; CURRENT FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: 09/653730
; PRIOR FILING DATE: 2000-09-01
; PRIOR APPLICATION NUMBER: 60/153022
; PRIOR FILING DATE: 1999-09-03
; NUMBER OF SEQ ID NOS: 710
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 372
; LENGTH: 679
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-10-389-647-372

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QY 315 ERADYVESYGVDDIDIAEOTNNMLANASIEARAGEAGEGVAVADVKALAEBSRQST 374
 475 --ARKTIADITIGVIDGIAFCQITLITANAAVEAARAGEORGFAVAVAGCVRTIAGCSAAAK 532
 Db 475 --ARKTIADITIGVIDGIAFCQITLITANAAVEAARAGEORGFAVAVAGCVRTIAGCSAAAK 532
 QY 375 RVEELVEQMGAEETHEEVDQDLEVNQRIGEGVREAEEMETLOETDPAVEDAASGMQEVST 434
 Db 533 EIKTILS-----DSVDKYE---NGMTLVAAGQGTMSIDILVALIRVTDIMSEIAA 578
 QY 435 ATDQBAVSTEEVAEMWDSVDPBAGELAAALDIDATDQCVRTYEVEEYTGKLS 489
 Db 579 ASAEQSTGIEEVNVAISQNDMDTQOAAALVEEAAA-----AEMQBAQGLIN 626

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RESULT 10
US-10-282-122A-77066
/ Sequence 77066, Application US/10282122A
/ Publication No. US20040029129A1
/ GENERAL INFORMATION:
/ APPLICANT: Wang, Liangsu
/ APPLICANT: Zamudio, Carlos
/ APPLICANT: Malone, Cheryl
/ APPLICANT: Haeselbeck, Robert
/ APPLICANT: Ohlsen, Karl
/ APPLICANT: Zyskind, Judith
/ APPLICANT: Wall, Daniel
/ APPLICANT: Trawick, John
/ APPLICANT: Carr, Grant
/ APPLICANT: Yamamoto, Robert
/ APPLICANT: Forsyth, R.
/ APPLICANT: Xu, H.
/ TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
/ FILE REFERENCE: ELITRA.034A
/ CURRENT APPLICATION NUMBER: US/10/282.122A
/ CURRENT FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: 60/191, 078
/ PRIOR FILING DATE: 2000-03-21
/ PRIOR APPLICATION NUMBER: 60/206,848
/ PRIOR FILING DATE: 2000-05-23
/ PRIOR APPLICATION NUMBER: 60/207,727
/ PRIOR FILING DATE: 2000-05-26
/ PRIOR APPLICATION NUMBER: 60/230,335
/ PRIOR FILING DATE: 2000-09-06
/ PRIOR APPLICATION NUMBER: 60/230,347
/ PRIOR FILING DATE: 2000-09-09
/ PRIOR APPLICATION NUMBER: 60/242,578
/ PRIOR FILING DATE: 2000-10-23
/ PRIOR APPLICATION NUMBER: 60/253,625
/ PRIOR FILING DATE: 2000-11-27
/ PRIOR APPLICATION NUMBER: 60/257,931
/ PRIOR FILING DATE: 2000-12-22
/ PRIOR APPLICATION NUMBER: 60/267,636
/ PRIOR FILING DATE: 2001-02-09
/ PRIOR APPLICATION NUMBER: 60/269,308
/ PRIOR FILING DATE: 2001-02-16
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 78614
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO: 77066
/ LENGTH: 626
/ TYPE: PR1
/ ORGANISM: Vibrio cholerae
US-10-282-122A-77066

Query Match 14.5%; Score 348; DB 4; Length 626;
Best Local Similarity 27.4%; Pred. No. 2e-12; Indels 32; Gaps 6
Matches 92; Conservative 78; Mismatches 134;

174 MKLTLFDDQI-----ANDTYISYACRLHDEISROELANAVATVVEAPLSS 221
Db 298 MSLPLTBSAIDIASGGGLTKLDTNLDKFSFLALGFSFTMLSGSQIRQLTINS 357
222 LEATSGDVAERTDTNRAFTDDQVDRMDVSRISVSASVEEVASTADDVRTSDEAL 281
: : : : : : : : : : : : : : : : : : : : : : : : : : : :

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Db 358 VLDGAETKANEVSLVVEQOL-----QELIOLATMNEKAMTASEVANSQVUADA 410
QY 282 AOCGEAADDALATMTDIDEATDGV-----AGVEOLGE--RAAD-VESVTGVIDDIA 331
Db 411 AEGESA-----SLEGSSVHETTDALQRLSIRIGSSVEDVKELKATDRIETVLDVINDIA 467
QY 332 EOTNLALNASIEAPAGAGCGFVAVADVAKALAEBSRQSTRVEBELVEQMOAETEEV 391
Db 468 DOTNLALNAIEAPAGAGSGRGFAVADERTLAORTQOSTQOISEIIEOLOEGAKNVS 527
QY 392 DQLEVENQIGSEVERVEEMETLOETDPAVEDAAGMOEVSPTADEQAVSTEEVAMVD 451
Db 528 RSNDESKLETVDIVERTVQVNEKISLVQQAIIHRISDMNLQIASAEBOSLVAEEINNMY 587
QY 452 GVDVDRAGEIAAALDDIADATDQOVRTVEEVEVETVGK 487
Db 588 NIKDLSIKSEASASNAGTENNAQVSKVEQNELINE 623

RESULT 11

US-10-282-122A-52305
; Sequence 52305, Application US/10282122A
; Publication NO. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl
; APPLICANT: Zyckind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; PRIORITY FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PAM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 52305
; LENGTH: 686
; TYPE: PRT
; ORGANISM: Clostridium botulinum
US-10-282-122A-52305

Query Match 14.1%; Score 338; DB 4; Length 686;
Best Local Similarity 26.8%; Pred. No. 8.6e-12;
Matches 91; Conservative 80; Mismatches 130; Indels 38; Gaps 4;

QY 178 LTFDQIAMDITYIDVGAORLHDEIDSRQELANAV-----ATHVEAPLSLE---ATSQ 227
Db 350 LTKVEIIVNEDEIGKLSKIFNTMIDSLREITNNINNPSIQLAGSSQELISSAEQTSAVE 409
QY 228 DVAERTDTTARATDQVDMADVSRSEISSVSASVEEVASTADVARTSDAEALAOQSEA 287
Db 410 EISSATTEELASGAENQVAKSNSSLLMDVMGNMTYTLKEFDEIISFSNNTVTLASKGE 469
QY 288 AADALATMTDIDEATDGVTAQVEOLGEPAADVESVTGYIDIAOTNLALNASIEEAR 347
Db 470 NMSNMVQOMATIKNSVNSNIMYDLQKNSEIGINVELIINTIADQTNLALNASIEEAR 529
QY 348 AGAGGCFVAVADVAKALAEBSRQSTRVEBELVEQMOAETEEVQDQLEVNORIGSEVER 407
Db 530 AGAGGCFVAVADVAKALAEBSINSANNIKULIANTQDKTKALNSIKGASQSEKGESEI 589
QY 408 VEEAMETLOEI-----TDAVEDAAGMOEVSPTADEQAVSTEEV 446
Db 590 VAEVESLGEILNSFSNVNHRKFSVDSMTIAGNSDITAMASKLYDIETISNTASANTEEV 649
QY 447 AENVGVDVDRAGEIAAALDDIADATDQOVRTVEEVEVETV 485
Db 650 AASTE-----EQSATIEITEISIEKIVSMVENLKESV 681

RESULT 12

US-10-332-288-28
; Sequence 28, Application US/10332288
; Publication NO. US20040054165A1
; GENERAL INFORMATION:
; APPLICANT: RAINEY, Paul Barton
; APPLICANT: SPIERS, Andrew Julien
; APPLICANT: BANTINAKI, Eleni
; TITLE OF INVENTION: BACTERIAL POLYSACCHARIDE AND BIOFILM DEVELOPMENT
; FILE REFERENCE: 10317.70012US00
; CURRENT APPLICATION NUMBER: US/10/332,288
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: PCT/GB01/03077
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: UK 0016842.7
; PRIOR FILING DATE: 2000-07-07
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 28
; LENGTH: 547
; TYPE: PRT
; ORGANISM: Pseudomonas fluorescens
US-10-332-288-28

Query Match 13.9%; Score 332; DB 4; Length 547;
Best Local Similarity 25.0%; Pred. No. 1.5e-11;
Matches 119; Conservative 84; Mismatches 189; Indels 84; Gaps 12;

QY 66 TDYVDHLESYERQODLPANSTKTVEOLKETQAEYLLGLRGGEVDTXYA----- 114
Db 89 TDKNDYKSFARLEQGANIEKTI---HGQAD-----RMEPDNFKAAHINNKVLAQV 138
QY 115 -QPARIGKIDVGLGPDVYLAGVTRYTGILDALADV-VADRGEEAAAADVDELV----- 168
Db 139 LERVENADLPGANQOLEBOULTPIWTSGRMKLNIIITENKNVDSR---ATAIDBAVLAK 195
QY 169 -----ARPLPMKILTFDQIAMDITYID-STAQRHLH---DE 200
Db 196 ISMAVSLILAILAAGLCGLILMBAIMAPQRIYDI-----LETRRGDLSKRLNLERKDE 250
QY 201 IDSRQELANAVATHTVAPLSSLEATSGDVARTDTRARATDQVDMADVSRSEISSVSAS 260
Db 251 FGAVETGFNDMMETLALVSOAQRSSVQVTTSTVEIAAISKQOQATRTETTAATTEIGAT 310
QY 261 VEEVASTADVARTSDAEALAOQGEAAA---DDALA---TMTDIDEATDGVTAQVEOL 313
Db 311 SREIAAISKQVLTMTVEVSTRAADQASVVAAGSGGQGLARMEETVHSGVGAADLVNAKLA 370

Db	256	KOLITLRN-----MVDIVD-----SEVLKAADEMSSAIVIALKSGESVSQA	300
Qy	158	EAAAAVDELVARFLPMLKLTFDDQIAMDTYDSYAQRHDELDNRQELANNAVTHVEA	217
Db	301	OEOSAAACE-----SLKSID-QOQIALLDAVTA-AQSDELDELUR-----	339
Qy	218	PLLSLEATGQVAERTDTMRARTDQDVDRMDAVSREISSVASVEEVAASPADVRRTSE-	276
Db	340	-----ISTDIVKSSSEEVAAAABEELSAGIEETIRSSNEIMGALNQSSGAQMMAVSVER	392
Qy	277	-----DAEALACQEAAADAL-----ATWTDIDE-----ATDGVTAGVEQLGE	315
Db	393	GITSLTQIQEGARLKERARESSLKACEKMLTGIEENKTTVDEMILATTESTKAATENLNE	452
Qy	316	RAADVSVTGVIDIAE-----QTNLAINASTIEARAGEGEGFAVVADVKALAE	366
Db	453	-MANIERISROJDKITVDIGSNVISIOTMALAVNGAVEAARAGEYXKGFAVVSTDIQNLAND	511
Qy	369	SRSQSTRVELVEQNAE-----TEB-----TYDOLDEVNORIGEGER	407
Db	512	AAMNAQOIIXDYKNKIQEQINIVRKDLIDLSTWEEBAKALITTKOLDNVRSRMSDVLLG	571
Qy	408	VSEAMETLIOETDAVEDAASGMQEVSTADBOAVSTEVEAMVDGVDDRAGEITAAALDDI	467
Db	572	SKRISSESAGIBERSIADNAGMQOLATAAESHSHTGEMAAVPAAROQSSSTSELASAIENTI	631
Qy	468	ADATDQ 473	
Db	632	AAVADE 637	
 RESULT 14 US-10-282-122A-77602 Sequence 77602, Application US/10282122A Publication No. US20040029129A1 GENERAL INFORMATION: APPLICANT: Wang, Liangsu APPLICANT: Zamudio, Carlos APPLICANT: Malone, Cheryl APPLICANT: Haselbeck, Robert APPLICANT: Ohlsen, Karl APPLICANT: Zwickind, Judith APPLICANT: Wall, Daniel APPLICANT: Trawick, John APPLICANT: Carr, Grant APPLICANT: Yamamoto, Robert APPLICANT: Foreysch, R. TITLE OF INVENTION: Identification of Essential Genes in Microorganisms FILE REFERENCE: ELPITA.034A CURRENT APPLICATION NUMBER: US/10/282,122A CURRENT FILING DATE: 2003-02-20 PRIOR APPLICATION NUMBER: 60/191,078 PRIOR FILING DATE: 2000-03-21 PRIOR APPLICATION NUMBER: 60/206,848 PRIOR FILING DATE: 2000-05-23 PRIOR APPLICATION NUMBER: 60/207,727 PRIOR FILING DATE: 2000-05-26 PRIOR APPLICATION NUMBER: 60/230,335 PRIOR FILING DATE: 2000-09-06 PRIOR APPLICATION NUMBER: 60/230,347 PRIOR FILING DATE: 2000-09-09 PRIOR APPLICATION NUMBER: 60/242,578 PRIOR FILING DATE: 2000-10-23 PRIOR APPLICATION NUMBER: 60/253,625 PRIOR FILING DATE: 2000-11-27 PRIOR APPLICATION NUMBER: 60/257,931 PRIOR FILING DATE: 2000-12-22 PRIOR APPLICATION NUMBER: 60/267,636 PRIOR FILING DATE: 2001-02-09 PRIOR APPLICATION NUMBER: 60/269,308 PRIOR FILING DATE: 2001-02-16 Remaining Prior Application data removed - See File Wrapper or PALM.			

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;
; PRIOR APPLICATION NUMBER: 60/230,335
;
; PRIOR FILING DATE: 2000-09-06
;
; PRIOR APPLICATION NUMBER: 60/230,347
;
; PRIOR FILING DATE: 2000-09-09
;
; PRIOR APPLICATION NUMBER: 60/242,578
;

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Search completed: November 23, 2005, 05:09:01
Job time : 161.851 secs
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;
; PRIOR APPLICATION NUMBER: 60/230,335
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; PRIOR FILING DATE: 2000-09-06
;
; PRIOR APPLICATION NUMBER: 60/230,347
;
; PRIOR FILING DATE: 2000-09-09
;
; PRIOR APPLICATION NUMBER: 60/242,578
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